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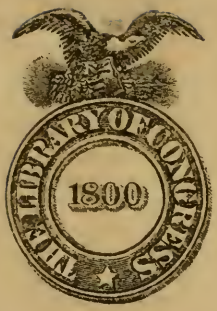

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PRESS OF
THE SUN BOOK AND JOB PRINTING OFFICE
BALTIMORE, MD.

MARYLAND

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ITS

Resources, Industries

AND

Agricultural Condition.

SECOND EDITION.

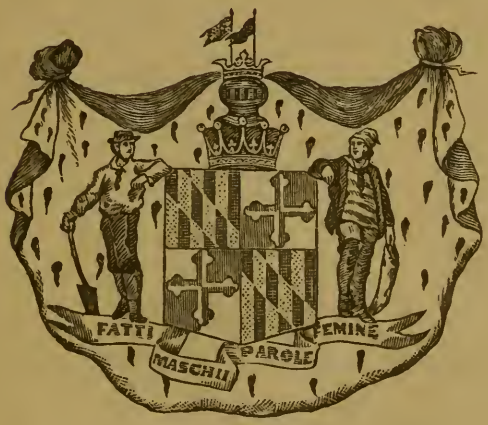
Prepared and Presented by

A. S. ABELL COMPANY,

THE SUN,

BALTIMORE, MD.

MARYLAND



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PRESS OF
THE SUN BOOK AND JOB PRINTING OFFICE,
BALTIMORE, MD.

PREFACE TO SECOND EDITION.

The second edition of "MARYLAND; ITS RESOURCES, INDUSTRIES, AND AGRICULTURAL CONDITION," is issued by the publishers of THE BALTIMORE SUN, at the suggestion of Governor Frank Brown, of Maryland, Mayor Ferdinand C. Latrobe, of Baltimore, and many others who have found the book well adapted to serve present needs of the State. Governor Brown, under date of September 18, writes as follows: "Permit me to suggest, that if possible the issue be continued as a good means of making the great advantages of this State more widely and better known. I consider the book an admirable publication, suiting present conditions exactly, and desire to see it distributed as freely throughout the country as may be convenient for you as its publishers."

Mayor Latrobe writes in the same vein suggesting the printing of another editon. The Mayor says: "The information contained in this book I consider very valuable and am sure that its wide circulation will greatly benefit our State and city. While hesitating to ask THE SUN to incur this expense, I hope that the well-known liberality of your great journal in everything affecting the interests of Maryland and Baltimore will induce you to give my request favorable consideration."

Originally prepared by THE SUN as a Souvenir of Maryland Day, September 12, 1893, at the World's Fair, Chicago, a large edition of the book was distributed

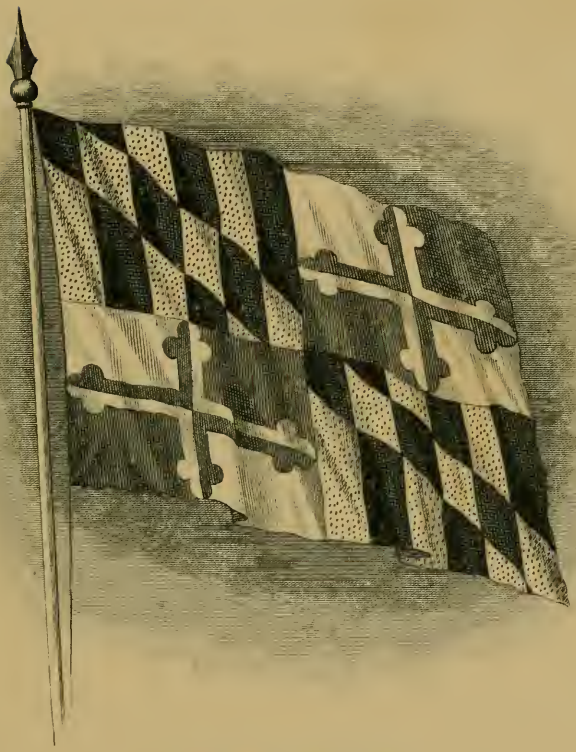
free. The publication has found such favor and is considered by all who have read it to be so useful, that the publishers take great pleasure in yielding to the request of the Governor and the Mayor, which they are pleased to state seems to be the wish also of many other esteemed correspondents in private station, who have written in commendation of the work.

As was stated in the announcement to the first edition: "Maryland has made remarkable progress in the development of its varied resources in recent years, and it offers exceptional attractions to settlers desiring to locate where they will have the opportunity to better their condition." It is in the hope of furthering this desirable object, that the present edition is printed.

Added to the original work is a record of the Maryland Day Ceremonies and some extracts from the speeches delivered on that occasion, calculated to promote the same object.

A. S. ABELL COMPANY,
THE SUN.

Baltimore, October 1, 1893.



MARYLAND STATE FLAG.

MARYLAND.

CHAPTER I.

THE STATE OF MARYLAND.

Maryland, a border State, is in touch on the one hand with the industrial progress of the Middle States, and on the other with the agricultural pursuits of the South, while its favorable position on the Atlantic Coast, and its extensive water area, give it advantages for commerce possessed by no other State of the Union. The Chesapeake bay divides the State into two parts, and extends from the capes up into Cecil and Harford counties, where the Susquehanna river empties into it at the north. From the east this magnificent bay is refreshed by eight large rivers and an equal number from the west, to say nothing of many smaller streams. The rivers emptying into this noble basin of the Chesapeake on the eastern side are the Elk, Sassafras, Chester, Third Haven, Choptank, Nanticoke, Wicomico and Pocomoke; on the west the rivers are the Bush, Gunpowder, Patapsco, South, West, Severn, Patuxent, and Potomac. These large streams, numbering seventeen in all, flowing into the bay from the north and the east and the west, are like many outstretched arms, affording not alone easy means of transportation, but embracing a great wealth of resources, the full development of which affords many inviting opportunities. The climate of Maryland is mild and healthy; the soil and the water are both fruitful; the burthen of taxation is extremely light; the best advantages are afforded for education; and there is no place where industrious people will

find a better chance of making a comfortable living easily, or where well-directed enterprise is so sure to be rewarded with great success. These opportunities present themselves on every hand—in the mountain region of the western counties; in the midland region, of which Baltimore City is the industrial and commercial centre; on the eastern shore of the Chesapeake, where manufactures are growing, and in Southern Maryland, which gets a strong impulse from the National Capital and the District of Columbia.

The influence of the three great cities, Philadelphia, Baltimore and Washington, is directly exerted in the development of Maryland, and to these may be added the influence also of the flourishing industrial city of Wilmington, Del.

A good many manufacturers of New York, Philadelphia and Baltimore find it advantageous to locate their industrial establishments in Maryland, where labor is plentiful and living cheap. Such a premium is set upon industrial pursuits that ground is often given free and other inducements liberally offered for the location of manufacturing plants in towns and villages convenient to railway lines or water routes. For desirable business enterprises highly favorable terms may be had in almost any part of the State. In Baltimore City, the plant of manufacturing establishments is exempt from local taxation, and water is abundantly supplied at exceedingly low rates for the service.

WATER POWER.

Maryland has no small advantages in its water power, which is very great. The streams in eastern and southern counties are sluggish, but in the western, northern and central parts of the State, where the country is hilly and the streams drain extensive territorial areas, the water power available for manufacturing purposes is immense. From Point of Rocks in Frederick county to

tide at Georgetown the Potomac river falls 230 feet in 47 miles. At the Great Falls of the Potomac, 14 miles above Georgetown, the river descends 80 to 90 feet in the distance of one and a-half miles. The descent of the principal fall is 35 or 40 feet in 150 yards. This is increased to 80 or 90 feet for a mile and a-half. The drainage area above the Great Falls is estimated at 11,476 square miles and the available power in low seasons at over 20,000 horse-power. The water supply for Washington and Georgetown is taken from above these Great Falls by a splendid aqueduct system and natural flow.

The Chesapeake and Ohio Canal running parallel with the Potomac from Georgetown to Cumberland, nearly 200 miles, affords ready facilities for the economical use of the abundant water-power of the river. The Patuxent, the Patapsco and the Susquehanna, all draining extensive territorial areas, have water-power facilities that present good opportunities for development. In Cecil county, Principio, Northeast and Big Elk creeks use the water-power for cotton, woolen, grist, saw and paper mills. The water-power of the streams in Garrett, Allegany, Washington and Frederick is very great. At Harper's Ferry, just above where the Shenandoah flows into the Potomac, is a magnificent power. The fall from the canal dam to the mouth of the Shenandoah is about 22 feet. Above Harper's Ferry the Potomac receives the Antietam creek. Between the mouth of the Antietam and Williamsport there are two sites upon the Potomac, one a mile below Shepherdstown, which has an estimated power, in the low season of dry years, of 920 horse-power, and a second, some 10 to 15 miles above, of 725 horse-power. The Conococheague creek, which joins the Potomac near Williamsport, drains an area of about 500 square miles. In all this region there are abundant opportunities for milling and other manufacturing enterprises.

IMBEDDED WEALTH.

As the Chesapeake bay is the centre of the State, almost wholly within Maryland jurisdiction, its importance commands attention. Prof. Wm. K. Brooks, of Johns Hopkins University, says: "The Chesapeake bay is a great river valley; not as large as that of the Nile or Ganges, but of enough consequnce to play an important part in human affairs, and to support in comfort and prosperity a population as great as that of many famous States. It receives the drainage of a vast area of fertile land stretching over the meadows and hillsides of nearly one-third of New York and nearly all of the great agricultural States of Pennsylvania, Maryland and Virginia. The most valuable part of the soil of this great track of farming land, more than forty million acres in area, ultimately finds its way to the bay, in whose quiet waters it makes a long halt on its journey to the ocean, and it is deposited all over the bay, in the form of fine, light, black sediment known as oyster mud. This is just as valuable to man, and just as fit to nourish plants, as the mud which settles every year on the wheat fields and rice fields of Egypt." This alluvium is in fact a natural fertilizer which sustains an endless variety of microscopic plants and animals on which the Chesapeake bay oyster fattens and multiplies and becomes the exceptional oyster of the world for flavor and other qualities. It is estimated that for fifty-six years, that is from 1834, when the oyster packing business was established in Maryland, to the year 1891, upwards of 400,000,000 bushels of oysters were taken from the natural beds in the Chesapeake bay and its tributaries for packing and shipment. Under proper restrictions and regulated oyster farming, which must come in the near future, the Chesapeake oyster supply will prove an almost boundless source of wealth and

comfort and prosperity to many thousands of the inhabitants of the State.

THE INFLUENCE OF CLIMATE.

Since the organization of the Maryland State Weather Service in 1891, extended and valuable observations have been made by the scientists of the bureau, which cannot fail to be of practical use to every one who may look towards this State for a home or for a business pursuit. It has been well said that "Nothing so materially affects the development of a country as its climate," and that where the climate is favorable there prosperity and progress may be confidently sought. This condition exists in Maryland, where all the natural surroundings and diversity of climate permit a variety of pursuits, and where the welfare of the community does not depend upon the success or failure of one or more enterprises. Prof. Wm. B. Clark, of the Johns Hopkins University, director of the Maryland State Weather Service, says: "Such diversity in climate, with its attendant variety of occupations, is found in the State of Maryland. This may be explained by the complexity of the surface configuration, the presence of the sea upon the eastern borders, the great area of highland which occupies the western division, and the bays and estuaries which deeply indent the land in all directions in the Chesapeake region. Although the climate in general is what is known as continental, it is greatly modified in the eastern portion of the State by the ocean and the Chesapeake bay, and in the extreme southeast becomes almost oceanic or insular, surrounded as the land is on nearly all sides by water."

The climate is such, in fact, that out of doors work may be done comfortably for nine months in the year. There are no blizzards or cyclones, and long continued droughts are rare.

TEMPERATURE.

The annual mean temperature of the State of Maryland is 53.8, and for the seasons as follows:

Spring, 51.2; Summer, 74.0; Autumn, 55.0; Winter, 34.4.

The mean temperature for the four climatic divisions of Maryland during the seasons of the year is as follows:

Climatic Divisions.	Spring.	Summer.	Autumn.	Winter.	Year.
Eastern Maryland.....	51.7	74.5	55.8	36.1	54.5
Southern Maryland.....	53.1	75.5	57.2	36.9	55.6
Northern-Cent. Maryland	50.6	73.5	54.3	33.1	53.0
Western Maryland.....	49.4	72.7	52.7	31.7	52.0

RAIN FALL, ETC.

The mean precipitation, rain fall, etc., for the year, in the whole State is 42.43 inches. For the seasons it is as follows:

Spring, 12.88; Summer, 11.60; Autumn 9.64: Winter, 9.31.

The mean precipitation for the four climatic divisions of Maryland during the seasons is as follows:

Climatic Divisions.	Spring.	Summer.	Autumn.	Winter.	Year.
Eastern Maryland	12.39	11.74	9.13	9.40	42.66
Southern Maryland.....	12.71	11.96	10.77	9.31	44.75
Northern-Cent. Maryland	12.07	11.91	10.02	9.73	43.73
Western Maryland.....	10.33	10.78	8.63	8.81	38.55

COUNTY AREAS.

The gross area of the State of Maryland is 12,210 square miles, of which 2,350 square miles are water and 9,860 square miles land. The county areas—land—in square miles are as follows:

Allegany,	477	Harford,	422
Anne Arundel,	400	Howard,	250
Baltimore,	622	Kent,	315
Baltimore City,	32	Montgomery,	508
Calvert,	218	Prince George's,	480
Caroline,	315	Queen Anne's,	352
Carroll,	426	Saint Mary's,	360
Cecil,	375	Somerset,	365
Charles,	460	Talbot,	285
Dorchester,	610	Washington,	435
Frederick,	633	Wicomico,	369
Garrett,	680	Worcester,	475

POPULATION OF MARYLAND.

COUNTIES.	TOTAL.	WHITE.		COLORED.	
	1890.	Males.	Females.	Males.	Females.
The State,	1,042,390	409,805	416,688	105,886	110,011
Allegany,	41,571	19,874	20,261	716	720
Anne Arundel,	34,094	10,429	9,151	7,573	6,941
Baltimore,	72,909	32,292	30,387	5,448	4,782
Baltimore city,	434,439	176,949	190,194	29,165	38,131
Calvert,	9,860	2,520	2,276	2,661	2,403
Caroline,	13,903	5,088	5,004	1,974	1,837
Carroll,	32,376	15,037	15,204	1,687	1,048
Cecil,	25,851	11,156	10,694	2,079	1,922
Charles,	15,191	3,500	3,554	4,134	4,003
Dorchester,	24,843	8,259	7,874	4,437	4,273
Frederick,	49,512	21,215	21,768	3,236	3,293
Garrett,	14,213	7,284	6,744	95	90
Harford,	28,993	11,487	11,130	3,295	3,081
Howard,	16,269	6,307	5,852	2,088	2,022
Kent,	17,471	5,504	5,160	3,607	3,200
Montgomery,	27,185	8,821	8,679	4,901	4,784
Prince George's,	26,080	7,606	7,261	5,989	5,224
Queen Anne's,	18,461	6,193	5,711	3,471	3,086
St. Mary's,	15,819	4,185	3,968	3,908	3,758
Somerset,	24,155	7,573	7,077	4,993	4,512
Talbot,	19,736	6,275	5,973	3,916	3,572
Washington,	39,782	18,206	19,068	1,216	1,292
Wicomico,	19,930	7,350	7,381	2,560	2,639
Worcester,	19,747	6,695	6,317	3,337	3,398

URBAN POPULATION.

The population of the thirty-four cities, towns and villages of Maryland having 1,000 or more inhabitants, in the order of their rank, is as follows:

Cities, Towns and Villages.	Counties.	Population.	
		1890.	1880.
Baltimore city,		434,439	332,313
Cumberland,	Allegany,	12,729	10,693
Hagerstown,	Washington,	10,118	6,627
Frederick,	Frederick,	8,193	8,659
Annapolis,	Anne Arundel,	7,604	6,642
Cambridge,	Dorchester,	4,192	2,262
Frostburg,	Allegany,	3,804	.....
Havre de Grace,	Harford,	3,244	2,816
Easton,	Talbot,	2,939	3,005
Salisbury,	Wicomico,	2,905	2,581
Westminster,	Carroll,	2,903	2,507
Chestertown,	Kent,	2,632	2,569
Sparrow's Point,	Baltimore,	2,507	.....
Elkton,	Cecil,	2,318	1,752
Catonsville,	Baltimore,	2,115	1,712
Laurel,	Prince George's,	1,984	1,206
Port Deposit,	Cecil,	1,908	1,950
Pocomoke city,	Worcester,	1,866	1,425
Rockville,	Montgomery,	1,568	688
Crisfield,	Somerset,	1,565	986
Westernport,	Allegany,	1,526	1,468
Hyattsville,	Prince George's,	1,509	288
Ellicott city,	Baltimore & Howard,	1,488	1,784
Towson,	Baltimore,	1,487	.....
Snow Hill,	Worcester,	1,483	1,276
Belair,	Harford,	1,416	.....
St. Michael's,	Talbot,	1,329	1,175
Centreville,	Queen Anne's,	1,309	1,196
Williamsport,	Washington,	1,277	1,503
Northeast,	Cecil,	1,249	988
Sharpsburg,	Washington,	1,163	1,260
Chesapeake city,	Cecil,	1,155	1,402
Oxford,	Talbot,	1,135	689
Oakland,	Garrett,	1,046	910

The towns of Maryland are as a rule situated in healthy localities. Many of them are on tributaries of the Chesapeake. Manufacturing industries are springing up in most of them and the labor to be had is intelligent and contented. All the towns and cities are well supplied with schools, churches and other institutions, and they offer great inducements to settlers who have trades or to capital desirous of embarking in manufacturing enterprises.

State taxation in Maryland is very light, the rate being only 17¾ cents on the $100.00. County, town and city taxes are also easy. In Baltimore, where manufacturing plant is exempted, the State and city taxes together are but $1.72¾ on the $100.00.

ASSESSED VALUE OF PROPERTY FOR TAXATION.

Counties and Baltimore City.	Assessed value of property for State levy in 1892.	Amount of levy for 1892 at 17¾ cents on each $100.00.
Allegany,	$ 16,151,538	$ 28,669 01
Anne Arundel,	10,874,049	19,301 44
Baltimore city,	277,171,612	491,979 61
Baltimore county,	41,359,723	73,413 50
Calvert,	2,033,209	3,608 95
Caroline,	4,351,415	7,723 74
Carroll,	15,877,537	28,182 62
Cecil,	13,271,949	23,557 70
Charles,	3,410,140	6,052 98
Dorchester,	6,193,888	10,994 15
Frederick.	23,613,030	41,913 13
Garrett,	4,261,610	7,564 36
Harford,	12,444,104	22,088 27
Howard,	7,515,094	13,339 29
Kent,	7,783,728	13,816 11
Montgomery,	10,425,220	18,504 76
Prince George's,	9,138,883	16,221 52
Queen Anne's,	7,544,416	13,391 34
St. Mary's,	2,718,126	4,824 67
Somerset,	4,193,568	7,445 57
Talbot,	8,698,294	15,439 46
Washington,	17,351,775	30,799 40
Wicomico,	4,149,119	7,364 68
Worcester,	4,605,481	8,174 72
Totals,	$515,137,528	$914,368 98

ASSESSED VALUE OF PROPERTY IN MARYLAND FOR SIXTEEN YEARS.

1877	$478,468,028	1885	$473,452,144
1878	464,425,790	1886	476,829,611
1879	466,470,995	1887	485,839,772
1880	459,187,408	1888	490,016,183
1881	461,459,939	1889	477,398,380
1882	462,824,879	1890	482,184,824
1883	466,089,380	1891	510,003,077
1884	469,593,225	1892	515,137,528

DEBT OF MARYLAND, SEPTEMBER 30, 1892.

3.65 per cents		$3,000,000 00
3 per cents		5,684,986 24
Total bonded debt		$8,684,986 24
Offset—		
Productive investments	$3,126,470 00	
Sinking fund investments and cash	2,476,229 89	
		5,602,699 89
Net debt		$3,082,286 35

During the year the total bonded debt was decreased $2,036,656.28, and now none but 3 per cent. and 3.65 per cent. bonds are outstanding.

MARYLAND COUNTY TAXES.

COUNTIES.	1888.	1889.	1890.	1891.	1892.
Allegany,	.32¼	.81¼	.93¼	.87½	.91½
Anne Arundel,	1.14	.89	1.09	.81	.98
Baltimore city,	1.90	1.90	1.85	1.55	1.55
do Annex,	.60	.60	.60	.60	.60
Baltimore county,	.61	.36	.63	.54	.70
Calvert,	.86 1/20	.87⅜	.92	.91	1.10
Caroline,	.97½	.92½	.92½	.92½	.92½
Carroll.	.50	.50	.50	.50	.50
Cecil,	1.00	.67½	.70	.63	.82
Charles,	.93	.92	.93	.88	.95
Dorchester,	.92¼	.85¼	.92½	.92½	.95½
Frederick,	.65	.70	.62	.62	.62
Garrett,	1.10	1.08	.98	.98	1.07
Harford,	.82	.75	.87	.83	1.03
Howard,	.62	.60	.76	.70	.71
Kent,	.91	.88	.88	.82	.97
Montgomery,	.92½	.92½	.91½	.90½	.90½
Prince George's,	.90	.95	1.00	.80	.80
Queen Anne's,	.87	.91	.92	.93	.89
Somerset,	.98¼	.92	1.20	.95	.90
St. Mary's,	1.00	.97	.93	.90	1.00
Talbot,	.73	.73	.83	.83	.78
Washington,	.75	.86	.78	.78	.78
Wicomico,	.81¼	.97½	77	.75¼	.82¾
Worcester,	.90	.80	.90	.78	.75

The State tax has been uniformly 17¾ cents on the hundred dollars since 1888. Taxes are levied by the

State only for schools and the public debt. For schools the levy is 10½ cents and for the debt 7¼ cents.

MARYLAND COAL FIELD.

The coal field of Maryland is situated between Savage and Dan's Mountains, in Garrett and Allegany counties. The basin is about twenty-five miles long and about five miles broad, though not more than half of this is covered by actual mining operations. A transverse ridge connects the Savage and Dan's Mountains and determines the two opposite directions of drainage. Three-fourths of the basin is drained by the George's Creek and its tributaries, thus giving to the coal of this region the title "George's Creek Coal." The mountain ranges are filled with veins of varying thickness, though little attention is paid to any except the one known as the "Fourteen Foot Seam." This bed of coal is remarkable for its form and thickness.

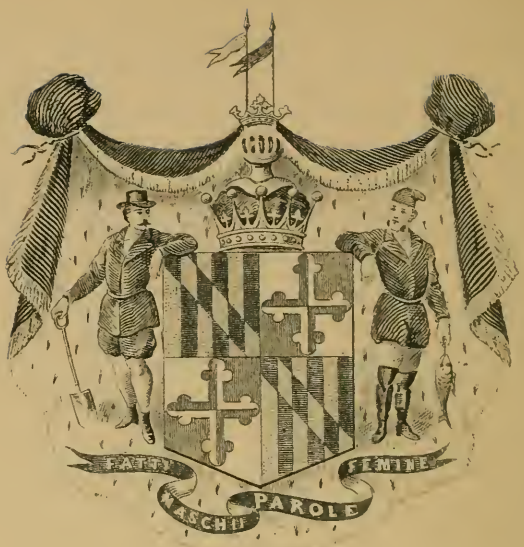
There are other veins which are worked and from which the yield is large. It is claimed that a bushel of Maryland coal will generate more steam than the same amount from any other region in the country. The condition of labor in the region is good, work is steady, and the number of men employed in all the mines is 3,980. Many of the miners own their homes.

CHAPTER II.

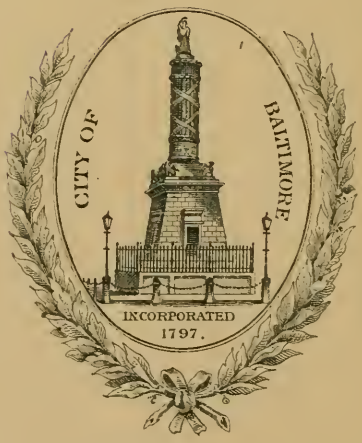
THE STATE CAPITAL.

The city of Annapolis, the capital of Maryland, is beautifully situated on the Severn river within sight of the Chesapeake bay. It is about twenty-five miles from Baltimore. Annapolis is one of the oldest towns in America. In colonial times it was a seat of learning and had a refined and elegant society. There are few towns which possess so many fine specimens of colonial architecture. The principal building of Annapolis is the old State House, built in revolutionary times, a splendid specimen of architecture. The Senate Chamber is the apartment in which the Continental Congress was assembled in 1783, when Washington appeared before them and resigned his commission. The State House also contains the historic chamber of the Court of Appeals and the State library. The original colonial government house, built when the seat of government was removed from St. Mary's, is still preserved. It stands within the State House grounds and is occupied by the Treasurer of the State. The land office in a modern building contains many interesting relics and documents. The Executive Mansion is a fine modern building. St. John's College is one of the oldest educational institutions in the United States.

Annapolis is also the seat of the United States Naval Academy. The grounds of the Academy occupy a position of great natural beauty. They are handsomely improved and well kept. The site was ceded to the government by the State, and in it the mansion occupied in early times by the governors stands and is used as a library. Old Fort Severn, built in the war of 1812, is also in the Academy grounds and is used as the



SEAL OF MARYLAND.



SEAL OF BALTIMORE CITY.

gymnasium. The Academy was founded by George Bancroft when Secretary of the Navy in 1845. It is a noble institution and equips the officers of the United States Navy with an excellent education.

STATE FLAG AND SEAL.

The heraldic device of Maryland, as displayed on her flag and seal, dates from very early colonial times. In August 1648, Cecilius, Lord Baltimore, the founder of the Province, sent out a new great seal to replace an earlier one which had been lost in the Ingle disturbances. The new seal bore on one side the Calvert arms, quartered with those of Crossland, Alicia Crossland having been the wife of Leonard Calvert, Cecilius' grandfather. On this seal, which is the same as the present great seal of the State, the first and fourth quarterings are: for Calvert, six pales or vertical bars, alternately gold and black, crossed by a diagonal stripe or "bend" in which the colors are reversed. The second and third quarterings are: for Crossland a quartered field of red and white, charged with a Greek (or equal-limbed) cross of the form called "botonny" or "budded;" the limbs terminating in a trefoil. This cross is "counterchanged," as it is termed, that is, it is red on the white part of the field and white on the red. The shield is surmounted by a palatine's cap, resembling an earl's coronet, and indicating the palatinate dominion of the Calverts in Maryland. While above all is a helmet with a ducal crown from which spring two small banners, one gold and one black, this being the Calvert crest. To this device are added a plowman and fisherman as supporters.

On a scroll beneath is the Calvert motto: Fatti maschii parole femine. This is popularly rendered: "Manly deeds, womanly words;" a very pretty version, though not strictly correct. The exact rendering is: "Deeds (are) males, words females;" an Italian proverb

cited in the dictionary of the Academy Della Crusca, and explained to mean, "Where deeds are needed, words will not suffice."

Behind the shield and supporters is a mantle, and around the whole runs a scroll bearing the legend: Scuto bonæ voluntatis tuæ coronasti nos (Ps. v. 12, Vulgate): "With the shield of thy good will thou hast encompassed us."

The reverse of the seal bore the effigy of the proprietary in full armor and mounted, surrounded with the inscription, "Cecilius absolutus dominus Terræ Mariæ et Avaloniæ Baro de Baltimore." ("Cecilius, absolute Lord of Maryland and Avalon, Baron of Baltimore.")

Many impressions of this seal remain, as also the massive silver seal which was used by Charles, the son and successor of Cecilius; but had all been lost, the letter which Cecilius sends with it describes it so minutely that we know that our present great seal is a faithful copy of the device on the original.

The flag of the State bears the escutcheon of the great seal—the Calvert and Crossland arms quartered. This device seems to have been adopted by common consent, as there is no record of the formal adoption of any design as the official flag of the State. That the colony had a distinct flag or standard, we know. The first recorded instance of the use of a Maryland flag occurs in Leonard Calvert's report of the reduction of Kent Island (February, 1638), in which he says that he and his force marched with Baltimore's banner displayed. At the battle of the Severn in 1655, where the supporters of the proprietary government under William Stone, the governor, were defeated by the Parliamentary party, under Captain William Fuller, Stone's forces marched under the flag of Maryland borne by William Nugent, "standard bearer of the Province," while Fuller's party displayed the flag of the Commonwealth, charged with the crosses of St. George and St. Andrew. It is also

said that a Maryland flag was carried by the Marylanders who accompanied Braddock's expedition against Fort Du Quesne in 1756.

A Maryland flag was presented at the outbreak of the late war to the Frederick Volunteers, an organization which afterwards became part of the First Maryland Regiment, C. S. A.; and it was carried from the first battle of Manassas, July 21, 1861, to the surrender at Appomattox, April 9, 1865.

It is almost superfluous to add that Marylanders take great pride in their beautiful and historic flag. It forms a part of the stands of colors of the principal militia commands, and is displayed on the State House on occasions of public festivity.

MARYLAND LINE.

They are also proud of the deeds of Maryland soldiers, whose bravery forms a brilliant chapter of the history of the Revolution. The First Maryland was the finest regiment of regulars in the army of General Greene, which saved the Carolinas and paved the way for the surrender of Cornwallis, at Yorktown. It had served under Washington in his New Jersey campaigns, and when transferred to the South, had gloriously routed Tarleton's veterans at Cowpens. At Guilford Court House, March 15, 1781, it again distinguished itself, charging the British guards with the bayonet, and killing numbers of them. The whole effective force of the Americans in the battle under General Greene amounted to about 1,651 regulars, mostly Marylanders, and 2,000 militia. The troops of Cornwallis numbered about 2,400 men. The British loss was 600 in killed, wounded and missing. General Greene stated that three hundred of his Continentals, nine North Carolinians and one hundred Virginians, were killed and wounded.

The battle was fought hand to hand. Two combatants particularly attracted the attention of those around

them. They were Colonel Steuart, of Lord Cornwallis' guards, and Captain John Smith, of the Marylanders, both men conspicuous for strength and bravery. They had previously met on the field and had vowed that their next meeting should end in blood. They rushed at each other furiously. The quick pass of Colonel Steuart's small sword was quickly put by with the left hand of the Marylander, whose heavy sabre cut down Colonel Steuart and ended his life. A ball discharged at Captain Smith as his sword descended, grazed his head and brought him to the ground, as the bayonet of one of his men, who was always near his captain in the hour of danger, pierced the heart of a Briton who was coming up to defend Colonel Steuart.

MARYLAND MILITIA.

Enlisted men of the Maryland National Guard are required to serve for three years and to be called out in any emergency. The force is limited to 38 companies, or 2,200 enlisted men, organized into one brigade. Camps of instruction are held once in two years, at such time and place as the Governor may direct. For every day in camp enlisted men are paid $1.33, and officers the same as regular army officers.

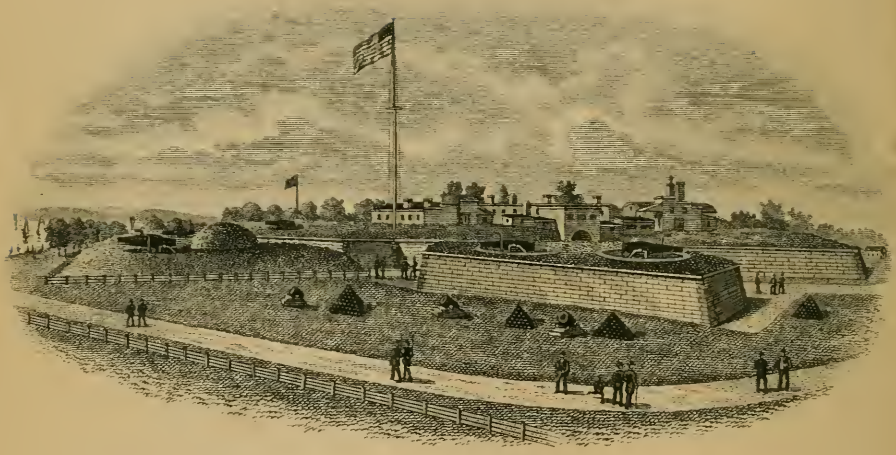
The first battalion of Maryland naval militia was formed at Annapolis, August 25, 1891, and comprises three companies. Each company is divided into four gun crews. The nucleus of the battalion is the State fishery force of Maryland, known as the Oyster Navy, the officers and crew of which are enrolled in the naval reserve.

PEGGY STEWART'S DAY.

Marylanders celebrate October 19 as Peggy Stewart's Day. This anniversary commemorates the burning of the tea-laden brig Peggy Stewart at Annapolis, October 19, 1774. This tea burning was one of the most memorable

events in the history of Maryland. The general convention which assembled at Annapolis on the 22d of July, 1774, to strengthen the resistance to the stamp act and to all acts of Parliament taxing the colonies, resolved to stop all importations from and exportations to Great Britain so long as the acts taxing the colonies remain unrepealed. Among the taxes imposed by the British Government was one on tea. Massachusetts had already determined not to pay the tax, and on the arrival at Boston of a vessel having tea on board, a body of men, disguised as Indians, entered the ship, seized upon the chests of tea and threw them overboard. In Frederick County, Maryland, a resolution was passed on July 2, 1774, by a meeting of citizens, that they would not drink any tea nor suffer the same to be used in their families until the duty was repealed. The resolutions passed in general convention at Annapolis were in the same spirit of independence. The brig Peggy Stewart, of Annapolis, arrived at that port on the 15th of October, 1774, having among her cargo seventeen chests of tea. The consignees were merchants in Annapolis. The owner of the brig was Mr. Alexander Stewart. This violation of the resolution of the convention was regarded as an insult to the people of the province. Meetings were held by the citizens, at which Mr. Stewart and the brothers Williams, who were the importers, were denounced, and a committee was appointed to go on board and guard the tea until the county delegates were notified. Fearing the consequences of their act, Messrs. Stewart and Williams publicly acknowledged the impropriety of their conduct, offered to take the tea from the brig and burn it in the presence of the committee, but the popular indignation was so great that the citizens would not accept this atonement. Finally Mr. Stewart, to preserve the peace and assure protection to his own person, proposed to burn the vessel and her cargo, and in the presence of a

committee, he directed the brig to be run aground on Windmill Point, where he set fire to her with his own hands. In all this patriotic business there was no disguise. Every one connected with it was known. The burning of the vessel was begun and consummated in open day, and it was in this manner Maryland vindicated her right to stand shoulder to shoulder with her sister colonies in resisting taxation without representation. It was a bold defiance of the British Government, and the deliberate determination to hold no commercial intercourse with the mother country was thus emphasized in a manner worthy of a free people. The 19th of October is now called "Peggy Stewart's Day," in Maryland, and deserves its distinction. It was the prelude, less than two years later, to the Declaration of Independence that was consummated by the surrender of Cornwallis at Yorktown in October, 1781.



FORT McHENRY, BALTIMORE, MD.

CHAPTER III.

THE DEFENSE OF BALTIMORE.

The Defense of Baltimore, September 12, 1814, was a successful resistance of a combined attack of the British forces, by land and water. The land forces under General Ross were repulsed at North Point below the city, and the commander-in-chief lost his life. The naval squadron, unable to make any impression on Fort McHenry or the other defenses of the city, drew off and gave up the attempt.

Though the battle of North Point was what would now be called hardly more than a strongly supported skirmish, and the bombardment a spiteful incident of the attack, yet the defense of Baltimore is entitled to the place it occupies in the history of our country as a notable instance of the ability of men who rule themselves to defend themselves whenever the occasion may arise. We venerate and celebrate the deeds of our fathers in this memorable defense, because more than any other post-revolutionary event it serves to inspire confidence in the effectiveness of our system for emergencies as well as for the ordinary duties of peaceful periods. Two wars with the mother country, attended by successful resistance in both to the arms of a world-conquering race, were necessary to teach Great Britain to respect the power of the new republic, and we are not likely ever again to have trouble from that source, or indeed from any other foreign country so long as our institutions are preserved in the shape they were handed down by their founders, and we hold together as a people true to the principles we profess.

We profess to be the republic of peace, entertaining good-will toward all men, welcoming to our shores the

oppressed of all lands who may come to share the obligations as well as the benefits of our citizenship. We maintain a regular army or navy not for conquest or glory, but as a centre around which the fighting material of the country may rally to resist invasion, to preserve domestic order or redress wrongs done to American citizenship or American interests. The regular army and navy are of and for the people as much as the government, and as we expect to preserve domestic tranquility and good government through peaceful agencies, we need no other bulwark of defense than a properly organized and safely equipped militia, permanently and peacefully reposing in the masses of our citizenship ready for the country's call.

If any specific example of the safety of such reliance were needed, it would be supplied by the defense of Baltimore. The greatest thing about that defense was the public spirit of the people who responded to the emergency with patriotic zeal. They gave millions for defense, but not a single cent for tribute. The war itself was mainly resistance to the right of search on the seas claimed by Great Britain, under which her ships of war seized American citizens as subjects of the crown to recruit her naval forces. Our maritime interests and the growing commerce of the port identified us with opposition to this high-handed method of impressment and disposed us to fight it. Maryland subscribed for three millions of the government loan of fifteen millions to prosecute the war. The citizens of Baltimore raised half a million dollars by subscription to defend the city, and the local government created a defense loan. Before this there was neither municipal nor State debt of any account. So great and generous was the response to the call of the hour, both in money and men, that Baltimore is entitled to the first rank among the cities of the country for patriotism, and the claim then established has been well maintained ever since.

For a community of less than 40,000 inhabitants to make the stand Baltimore took at this juncture called for the exercise of courageous public spirit, which stiffened up the cause of the country and revived the energies of the national government and of the State of Maryland.

It must be remembered that when the invaders appeared before Baltimore their forces had burned the Capitol and scattered the government; they had raided the Potomac and swept the Chesapeake and its tributaries, carrying destruction wherever their ships and their boating expeditions could penetrate. The fleet was a flying terror, rapid and brilliant in movement, intended to raid and punish rather than to conquer and to hold. "Booty and beauty" was the war-cry, and to Baltimore they came for both, but they were badly disappointed. Though the time allowed for making preparations to resist the enemy was brief, every moment was used so well that when they landed and felt the strength of our positions and realized that to capture the city was a greater work than they were willing to undertake, they retired practically under cover of the guns of their ships and a futile bombardment. The flag of Fort McHenry which inspired the song of the "Star-Spangled Banner," still floats as it did over the smoke of battle and above the scenes of a gallant defense.

The boom of this defense echoed throughout the world and gave Baltimore such an impetus that in the decade between 1810 and 1820 its population nearly doubled, and the city has gone on ever since to increase and multiply and prosper—growing from a population of 35,500 to 500,000, pursuing varied industries, living in comfortable homes and enjoying all the many modern adjuncts of civilized life which science and inventive industry have supplied.

The seal of the City of Baltimore is a representation of the Baltimore Monument, perpetuating the memory

of this defense. The monument was erected in Washington Square, now Monument Square, as a tribute to the defenders of Baltimore who were killed in the Battle of North Point and in the bombardment of Fort McHenry. The original name Battle Monument was changed to Baltimore Monument by ordinance approved February 26, 1822, several years before the monument was finished. A representation of the monument was adopted as the seal of the city by ordinance approved February 20, 1827. The official seal is two inches high by one and three-quarter inches wide, and is elliptical. The seal of the city from its incorporation in 1797 to 1827 represented justice triumphing over the tempter. The old seal was adopted from that of the town commissioners to most of whose functions the corporation succeeded.

The conspicuous monument in Baltimore, however, is that which the patriotism of Maryland has erected to the memory of Washington. This monument is a noble Doric column of white marble, in Mount Vernon Place, in the heart of the city, on an eminence 98.5 feet above tide-water, rising 164 feet from the ground and surmounted by a colossal statue of the "Father of His Country." President Daniel C. Gilman, of Johns Hopkins University, in a recent article on the business and social attractiveness of Baltimore, says of the Washington Monument: "Such a column in such a position, and surrounded by such dwelling-houses, churches, libraries, and works of art, would be an ornament to Berlin or to Paris." If one goes to the top of this monument he can survey a wide area that is occupied by the dwellings and other edifices of more than half a million inhabitants. The immediate surroundings of the monument, radiating to the four points of the compass, are public reservations, ornamented and filled with statuary and other works of art in bronze, including fine specimens by Barye, a statue by Rinehart of Roger B. Taney, of Maryland, Chief Justice of the United States, and a statue of George Peabody.

FRANCIS SCOTT KEY.
(Author of the Star-Spangled Banner.)

CHAPTER IV.

THE STAR-SPANGLED BANNER.

No reference to Maryland patriotism would be complete without at least a brief statement of the circumstances under which Francis Scott Key wrote the national anthem, "The Star-Spangled Banner." Shortly before the British attack on Baltimore, in September, 1814, Mr. Key left the city under a flag of truce for the purpose of securing the release of Dr. Beanes, of Prince George's County, Md., who had been captured at Marlboro. He proceeded as far as the mouth of the Patuxent, but was not permitted to return by the British admiral lest he should so give warning of the intended attack on Baltimore. He was, therefore, brought up the Chesapeake Bay, to the mouth of the Patapsco, where the cartel ship was kept under the guns of a frigate, and he was compelled to witness the bombardment of Fort McHenry, which the admiral had boasted that he would carry in a few hours. During all the day and night of September 13, 1814, the shells rained upon Fort McHenry, the British vessels keeping a distance of about two miles. Major Armistead, the commander of the fort, felt that there was little use in replying to them at that long range, and so he passively endured the twenty-four hours of heavy bombardment. His guns were silent, except when one or more of the enemy's ships moved up closer to his parapets, and then his artillerymen replied with so vigorous a fire that they promptly withdrew from danger. After sundown of the 13th his firing almost entirely ceased, which increased the apprehensions in Key's mind that he was perhaps abandoning his position. Key walked the deck of the British vessel all that night, eagerly searching, by

the glare of the bursting shells, for a glimpse of the flagstaff and its standard. As the firing became more desultory toward dawn, his anxious tension of mind became unbearable, and the poem framed itself in his thoughts when the earliest light of breaking day showed him that the flag was still there and that the signal for withdrawal had been hoisted on the admiral's ship.

Mr. Key was released from custody and hurried to his home in Baltimore. The tradition is that he wrote the poem early on the morning of the 14th on the back of a letter that happened to be in his pocket. It was written with a lead pencil, and his desk was the top of a barrel on the deck of the vessel on which he was confined.

In the interval of a week between the composition and the publication the song probably received some revision at Mr. Key's hands. When printed it read as follows:

[*Tune—Anacreon in Heaven.*]

O! say can you see, by the dawn's early light,
What so proudly we hailed at the twilight's last gleaming,
Whose broad stripes and bright stars, through the perilous fight,
O'er the ramparts we watched, were so gallantly streaming?
And the rockets' red glare, the bombs bursting in air,
Gave proof through the night that our flag was still there:
O! say does that Star-Spangled Banner yet wave,
O'er the land of the free, and the home of the brave?

On the shore dimly seen through the mists of the deep,
Where the foe's haughty host, in dread silence reposes:
What is that which the breeze, o'er the towering steep,
As it fitfully blows, half conceals, half discloses?
Now it catches the gleam of the morning's first beam,
In full glory reflected, now shines in the stream.
'Tis the Star-Spangled Banner, O! long may it wave,
O'er the land of the free, and the home of the brave!

And where is that band, who so vauntingly swore,
That the havoc of war and the battle's confusion,
A home and a country should leave us no more?
Their blood has washed out their foul footsteps' pollution.

No refuge could save the hireling and slave,
From the terror of flight, or the gloom of the grave.
And the Star-Spangled Banner in triumph doth wave,
O'er the land of the free, and the home of the brave.

O! Thus be it ever when freemen shall stand
Between their lov'd homes and the war's desolation;
Blest with vict'ry and peace, may the Heav'n rescued land
Praise the Power that hath made and preserv'd us a nation!
Then conquer we must, when our cause it is just,
And this be our motto: "In God is Our Trust."
And the Star-Spangled Banner in triumph doth wave,
O'er the land of the free, and the home of the brave.

The song was first sung in public at the Holliday Street Theatre in Baltimore, on October 19, 1814, by Mr. Hardinge, a young actor attached to the company of Wm. Warren, the manager of the theatre.

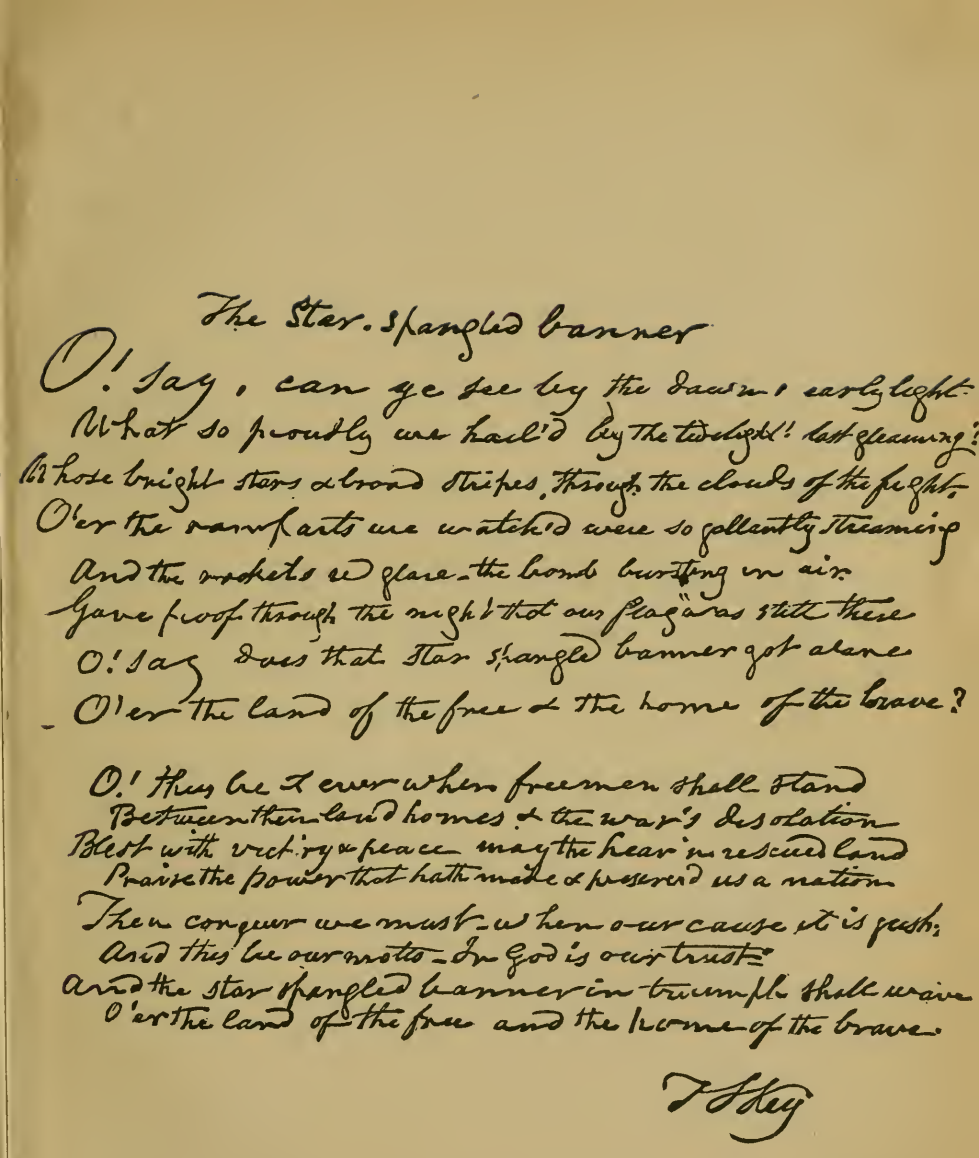
"The Star-Spangled Banner" which floated from the bastion facing the Patapsco river during the bombardment of Fort McHenry was forty feet long and twenty-six feet wide. It had fifteen horizontal stripes, and fifteen five-pointed stars, two feet from point to point, arranged in five indented parallel lines, three stars in each horizontal line.

The flag was made in Clagett's Brewery, at the junction of Jones' Falls and Lombard street, under the direction of Mrs. Mary Peckersgill, one of the founders of the Aged Women's Home of Baltimore, and Mrs. Margaret Sanderson, wife of Col. Henry S. Sanderson, at one time sheriff and collector of Baltimore. Mrs. Sanderson always prided herself much on the part she took in constructing the flag, and many years after the war with Great Britain her children were accustomed to call their mother "The Star Spangled Banner" for having had a hand in its construction. They made her a flag which on all patriotic occasions floated over their residence, on South High street.

From Clagett's brewery the flag was taken by a detachment of soldiers to Fort McHenry, and was in

position when Key saw its "broad stripes and bright stars" during the perilous night of the bombardment. After the conflict was over Col. George Armistead placed his autograph and the date of the bombardment upon one of the stripes and retained the flag in his possession. His widow inherited it at his death, and upon her decease it went to her daughter Georgiana, the late Mrs. Wm. Steuart Appleton, who was born at Fort McHenry, and at whose birth the flag was raised. She died in New York July 25, 1878, and bequeathed it to her son, Mr. Eben Appleton. The flag has been used upon several great occasions, notably to adorn Washington's war tent at Fort McHenry, September 14, 1824, for the reception of Gen. Lafayette. In 1874 the late Commodore Preble exhibited it at the rooms of the Massachusetts Historical Society. It was displayed to the public at the sesqui-centennial celebration in Baltimore in October, 1880. Mrs. Sanderson, feeble as she was, returned to her native city to witness the great pageant and to see for the last time "The Star-Spangled Banner" which she had helped to create. She sat in a window, and as the flag passed she shed tears when she recalled the time when she placed the cluster of stars in their field of blue. She died in New York in 1883, aged 85.

Francis Scott Key, the author of the song, was a native of Frederick county, Md., a graduate of St. John's College, Annapolis, and a lawyer of high standing at the Maryland bar. He was U. S. district attorney for Maryland by appointment of President Jackson, and died in Baltimore January 11, 1848. He was buried near Pipe Creek, Md., but his remains were subsequently removed to Frederick city, Md. James Lick, the California millionaire, devised $60,000 for the erection of a statue of Key in Golden Gate Park, San Francisco, and it was unveiled on July 4, 1888. Law was Mr. Key's pursuit in life, and literature only a relaxation, except in the case of the composition of the


The Star-Spangled Banner

O! say, can ye see by the dawn's early light
What so proudly we hail'd by the twilight's last gleaming?
Whose bright stars & broad stripes, through the clouds of the fight,
O'er the ramparts we watch'd were so gallantly streaming
And the rockets red glare, the bomb bursting in air
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O'er the land of the free & the home of the brave?

O! thus be it ever when freemen shall stand
Between their loved homes & the war's desolation
Blest with victory & peace may the heav'n rescued land
Praise the power that hath made & preserv'd us a nation
Then conquer we must when our cause it is just,
And this be our motto - In God is our trust -
And the Star Spangled Banner in triumph shall wave
O'er the land of the free and the home of the brave.

F Key

First and Last Stanzas of "The Star-Spangled Banner" in the handwriting of the Author.

national anthem. Neither on the stage nor in the newspapers of the time was any allusion made to his authorship of the Star-Spangled Banner. It is not impossible that this omission was intentional and that his name was suppressed by his own direction. Although he wrote many poems, only a few were published with his consent, and it was not until 1853 that they were collected into a small volume, edited by Rev. H. V. D. Johns. One of them is the hymn beginning—

"Lord, with glowing heart I'd praise Thee
For the bliss Thy love bestows."

CHAPTER V.

BALTIMORE CITY.

Baltimore is called the Monumental City, because it possessed the first monument to General Washington, the corner-stone of which was laid July 4, 1815, followed on September 12 of the same year by the laying of the corner-stone of the Baltimore Monument, commemorative of those who fell in the defense of the city from the combined attack of land and naval forces, during the war with Great Britain, in 1814. The movement for the Washington Monument was begun in 1809, while Baltimore was yet in its infancy, and it was not completed until 1829. It was originally intended to erect the Washington Monument on the site of the Baltimore Monument, in Calvert street, but the location was changed to that which has since become Mount Vernon Place, but was then known as Howard's Park, then covered with forest trees. Baltimore was founded in 1730, incorporated in 1797, and is the youngest city on the Atlantic coast. "Its history has been an almost unbroken chronicle of peace and prosperity." Dr. Holmes has said that three short American poems, each the best of its kind, were written at Baltimore, namely, Poe's Raven, Randall's Maryland, My Maryland, and Key's Star Spangled Banner. The Raven only was the product of peace, however. The Star Spangled Banner was written by the author while he was a prisoner on board of one of the British ships, bombarding Fort McHenry, and when the city was in arms to resist and drive off the invader. The poem of Randall was written at the beginning of the Civil War, which all the time threatened Maryland, and disturbed the even tenor of life in Baltimore. Yet with these comparatively slight

interruptions "peace and prosperity" have afforded every opportunity an energetic people could desire, for the prosecution of those industries which bring comfort and wealth, and refinement, and make happy homes for large populations.

THE CITY OF HOMES.

It is the pride of Baltimore that it stands unequalled as a city of homes. There are few or no tenement houses such as are known in many large cities of the country. The great majority of families in Baltimore occupy single houses, and there are fewer families to each dwelling-house than in any other city of the country.

The city area is 31.54 square miles, or 20,186 acres. The population to each square mile is about 14,000. The total population by the census of 1890 was 434,439. The local census carefully made by the police force footed up 455,427. The number of inhabitants in 1893 is estimated to be in excess of half a million.

There are nearly 800 miles of streets, of which over 100 miles are lined with shade trees. The average width of the streets is 66 ft. In New York the average width is 60 ft., Chicago 66, Philadelphia 50, Brooklyn 70, St. Louis 60, Boston 40.

The police force numbers 782 men; the firemen, 270; steam fire engines, 14; hose carts, 28; hook and ladder trucks, 6; miles of fire alarm wire, 500.

The number of acres in the public parks of Baltimore is as follows:

Druid Hill	700	Federal Hill	8¼
Patterson	56	Riverside	17¼
Patterson Pk. Ext'n	50	Carroll	19.72

In addition to these parks, the city is studded with public squares, while several of the wider streets, like Broadway, Mount Vernon Place and Eutaw Place, are beautiful with flowers, shrubbery, monuments, statuary, fountains, etc.

WATER SUPPLY.

The sources of the water supply of Baltimore are the Gunpowder river, which has a capacity of 425,000,000 gallons daily, and Jones' Falls, which has a capacity of 55,000,000 gallons daily. The water of the Gunpowder is brought seven miles through an underground aqueduct, circular, 12 feet internal diameter, by natural flow, with a fall of one foot to the mile. The storage capacity of the system is as follows:

Reservoirs.	Gals.	Reservoirs.	Gals.
Lake Roland..	400,000,000	Conduit.....	31,000,000
Conduit.....	6,000,000	Montebello....	500,000,000
Hampden.....	44,000,000	Clifton..	265,000,000
Druid Lake...	493,000,000	Guilford.....	41,000,000
Mt. Royal.....	30,000,000		
High Service..	26,000,000	Total.....2,346,000,000	
Loch Raven...	510,000,000		

The Gunpowder source of supply is 170 feet above tide, and the Jones' Falls source 225 feet. Some reservoirs where pumps are used are much more elevated in order to render high service. About 500 miles of mains distribute the water through the city. In the capacity of its reservoirs of water Baltimore excels all American cities except New York.

The average charge for water per dwelling in different cities is as follows:

Washington, D. C..	$4 50	Boston	12 00
New York..... ...	6 00	Indianapolis	12 00
Baltimore	7 00	Cincinnati	12 50
Brooklyn	8 00	Lowell, Mass.....	13 22
Philadelphia.....	9 00	Newark, N. J.	13 75
Hartford, Conn.....	9 00	Chicago	14 00
Minneapolis.....	9 00	St. Louis.....	14 00
Detroit	10 00	Worcester, Mass....	15 00
Milwaukee	11 00	Fall River, Mass...	15 00
Lynn, Mass.....	11 00	San Francisco.....	20 00
Cleveland, O.....	11 25	New Orleans.....	25 00
Buffalo, N. Y.....	12 00		

CITY HALL, BALTIMORE, MD.

ERA OF RAPID TRANSIT.

The past three years may be called, in the History of Baltimore, the Era of Rapid Transit. In this period about ten millions of dollars were invested in converting existing street and suburban horse car lines into cable traction and trolley electric railway lines. It is estimated that these rapid transit lines are altogether 100 miles long. Among the routes connecting the centre of the city with the suburbs is one having a considerable stretch in the city over an elevated structure, which is believed to be the first use ever made of elevated tracks for an electric railway, and has demonstrated the superiority of the trolley system over steam on such structures.

In connection with this rapid transit development should be mentioned the extensive terminal and tunnel facilities of the important steam railroad lines centering in Baltimore. Among the latest of these is the long Belt tunnel of the Baltimore & Ohio Railroad under the city. In this tunnel whole trains—even freight trains with their locomotives attached—are to be hauled six or seven miles by powerful electric motors. This is the first experiment of the kind in the country and is designed to keep the tunnel free from smoke. The tunnel is also lighted by electricity and the air kept fresh by electric fans.

So great an impetus has been given to the progress of the city by these enterprises that suburban development has been stimulated all around. This impetus is far greater than that which attended the introduction of horse car lines in 1858–9. Baltimore had hardly begun to feel the new impulse of street cars, when the outbreak of the Civil War, in 1861, temporarily checked enterprises of all kinds. It was not until the war was over that the fruit of the enterprise was realized. Then a remarkable expansion of the city took place and it grew so rapidly that faster means of transportation

than horse cars were needed long before the prudent conservatism of the city permited the change.

PEACE AND PROSPERITY.

It is hardly necessary to review the history of Baltimore, which comprises its "almost unbroken chronicle of peace and prosperity," except to show that its achievements, under these favoring conditions, have been worthy of the opportunity. Before the Revolution the enterprise of the city had extended its trade, by means of pack mules, to the far West—then hardly further off than Pittsburg. After the Revolution turnpikes were built and canals projected. These in turn gave place to steam railroads, while all the time the sails of the clipper merchantmen increased the volume of commerce and added to the importance of the port. Prior to 1820 the city was rich from foreign and domestic trade, combined and nearly monopolized in Baltimore. This was truly an era of "peace and prosperity," which was not shaken in 1837 nor again in 1857, when the financial crash of those periods overtook the country. Baltimore fairly sustained its credit during those fatal years as it has done ever since, during the disturbances which followed the close of the Civil War and during the panics of 1867 and 1873. To-day the city is as sound and stronger, financially, than ever, with business growing at a healthy rate and industries multiplying far more rapidly than ever before.

MANUFACTURES.

The total value of the manufactured products of Baltimore in 1890, according to the U. S. Census, was $140,401,026, and the number of hands employed, 83,091. The city is the chief seat of the canning industry of the United States, the materials being the famous oysters of the Chesapeake and tributaries, and fruits and vegetables. The annual product is 60,000,000 cans and about 20,000 hands are employed in the industry.

STEEL WORKS.

At Sparrow's Point, on the Patapsco, the great works of the Maryland Steel Company have, in recent years, been established by the parent concern at Steelton, Pa. The advantages of this location were admirably illustrated very recently when the great Krupp gun, designed for exhibition at the World's Fair, in Chicago, arrived from Germany. Nowhere else than at Baltimore were facilities to be found for the landing of this great engine of war, and other weighty exhibits sent over by the same manufacturers. At Sparrow's Point the work was successfully done. Here the Steel Company have a crane adjoining their marine works, which, in its way, is as powerful a piece of machinery as the great Krupp gun itself.

Sparrow's Point is a town of three thousand five hundred inhabitants, who live in houses that have been built by the Steel Company, which employs 2,000 or more operatives, many of whom live in Baltimore City, going by rail to and from their work. The establishment includes, beside an extensive steel-shipbuilding plant, blast furnaces, Bessemer and rail mills, and other equipment on the largest scale. The concern produced steel for the first time, on August 1, 1891, and the daily capacity of the plant is 2,000 tons, or a total annual capacity of between 600,000 and 700,000 tons, which, it is claimed, is equal to a full third of the total annual production of the Bessemer Works of the United Kingdom of Great Britain and Ireland.

CAR WORKS.

Another new industrial centre, the result of Baltimore City enterprise mainly, is the manufacturing establishment at Curtis Bay, which is known as South Baltimore. Here car works, a bolt and nut factory, machine shops, furnace, barrel factory, and a magnificent sugar refinery have been established. Steam and electric railways are the means of communication with Baltimore.

OTHER INDUSTRIES.

Extensive copper smelting works at Canton, Baltimore, and numerous shipbuilding yards, machine shops, furnaces, iron and steel works, together with a multitude of lesser manufactures, potteries, glass works and cotton mills, are of older date and widely known.

The cotton duck mills in and near Baltimore run 150,000 spindles, employ about 6,000 hands and produce three-fourths of the sail duck made in the United States. This industry, too, is of Maryland origin.

In brick making Baltimore ranks among the first American cities. Of brick laying, it has some of the finest specimens in the Shot Tower, the Safe Deposit Company building, Equitable building, the B. & O. Central building, the Johns Hopkins Hospital and other structures, to be seen on the American Continent.

IMPORTANT MANUFACTURES, 1890.

Industries.	Hands Employed.	Capital Employed.	Wages Paid.	Value of Product.
Brass Works,	1,187	$ 1,689,428	$ 663,056	$ 1,903,850
Clothing.	13,094	11,897,563	4,178,971	15,032,924
Fertilizers,	638	4,163,347	399,741	3,957,345
Foundries, &c.,	3,436	5,041,767	1,837,450	4,718,189
Oyster Packers, &c.	8,990	3,226,416	1,886,851	8,516,799
Distilleries,	146	1,421,225	94,824	2,085,560
Breweries,	690	4,924,988	532,739	3,825,174
Drugs,	698	935,725	246,028	1,947,950
Meat Packing,	421	1,153,856	225,112	4,311,412
Tobacco,	3,242	4,208,451	1,240,093	5,906,333

The number of establishments in each industry included in the above, are as follows: Brass works, 7; Clothing establishments, 125; Fertilizer works, 25; Foundries and machine shops, 65; Oyster and other packers, 40; Distilleries of liquor, 5; Breweries of malt liquors, 27; Drugs and medicines, 20; Meat packers, 14; Tobacco factories, 350.

Baltimore is famous for its silverware; its pottery has a wide reputation, and it excels in printing,

lithographing, clothing, shirts, overalls, straw goods, furniture making, pianos, and many minor manufactures. The type-setting machine is a Baltimore invention.

COMMERCIAL STATISTICS.

Excepting New York City, Baltimore is the largest grain market on the Atlantic coast. The port is provided with magnificent grain elevators. The following statistics are given of the grain trade, and value of foreign exports and imports:

GRAIN AND FLOUR.

RECEIPTS.	1892.	1891.
Wheat, bushels,	17,571,332	18,693,394
Corn, bushels,	20,631,527	6,928,006
Oats, bushels,	2,185,676	1,687,112
Rye, bushels,	922,685	1,206,813
Barley and Malt, bushels.	375,766	299,538
Flour, barrels,	3,555,447	3,099,339
EXPORTS.	**1892.**	**1891.**
Wheat, bushels,	16,493,079	16,061,283
Corn, bushels,	18,894,116	3,765,887
Oats, bushels,	172,271	.....
Rye, bushels,	740,670	.....
Barley and Malt, bushels,	26,785	.....
Flour, barrels,	3,652,153	2,736,153

IMPORTS AND EXPORTS.

YEAR.	Imports.	Exports.	YEAR.	Imports.	Exports.
1881.....	$16,278,946	$55,779,461	1887.....	$13,055,880	$49,545,970
1882.....	14,658,006	43,500,798	1888.....	12,098,629	45,099,334
1883.....	12,308,392	50,085,814	1889.....	15,409,234	62,077,610
1884.....	12,090,261	43,488,457	1890.....	15,339,312	72,120,083
1885	11,193,695	34,748,264	1891.....	18,270,000	79,475,175
1886.....	11,785,113	46,810,870	1892.....	14,258,571	93,126,389

CUSTOM-HOUSE RECEIPTS.

1892.....	$4,003,993	1889.....	$3,049,113
1891.....	3,267,034	1888.....	2,837,709
1890.....	3,105,800	1887.....	3,155,107

BANK CLEARANCES.

1892	$769,355,890	1889	$650,583,571
1891	735,714,652	1888	620,587,729
1890	753,095,093	1887	659,496,899

WHOLESALE TRADE.

Clothing—The output for 1892 estimated $13,500,000; invested capital $6,000,000; range of sales for individual houses, from $25 000 to $1,500,000.

Shoes and Leather business for 1892—Aggregate sales of jobbers, $8,175,000; aggregate sales of manufacturers, $5,260,000; hides, leather, shoe findings, &c., (manufactured and sold), $8,925,000; retail shoe trade, $4,675,000; total, $27,035,000.

Dry Goods and Notions—The dry goods business for 1892 aggregated about $20,000,000; notions about $10,000,000.

IMMIGRATION THROUGH BALTIMORE.

Months.	1892.			1891.		
	Males.	Females.	Total.	Males.	Females.	Total.
January.	774	695	1,469	444	359	803
February.	851	611	1,462	465	385	850
March.	3,998	2,067	6,065	1,905	1,242	3,147
April.	5,705	4,416	10,121	6,425	5,243	11,668
May.	5,515	3,849	9,364	3,521	2,728	6,249
June.	3,491	2,910	6,401	2,564	2,046	4,610
July.	1,929	1,708	3,637	1,621	1,522	3,143
August.	1,786	1,689	3,475	1,523	1,433	2,956
September.	761	731	1,492	1,643	1,519	3,162
October.	1,140	1,020	2,160	2,167	2,393	4,560
November.	1,390	1,411	2,801	1,939	1,840	3,779
December.	79	73	152	1,621	1,726	3,347
Totals.	27,419	21,180	48,599	25,838	22,436	48,274

During the year ending June 30, 1893, the foreign immigration through Baltimore numbered 26,156 persons, of whom 2,400, or nearly ten per cent., settled in Maryland.

DEBT OF BALTIMORE CITY, JANUARY 1, 1893.

Total funded debt, par value	$33,672,075 43
Total guaranteed debt, par value	992,000 00
Total debt	$34,664,075 43
Value sinking funds, par value	7,800,000 00
	$26,864,075 43
Productive and Interest-bearing assets (stocks at par value)	10,763,220 91
Balance of debt over available interest-bearing assets	$16,100,854 52

The funded and guaranteed debt was increased $1,888,025.48 during 1892 by the issue of $1,880,700 Internal Improvement 3½ per cent. 1928 Loan and $28,000 Jones' Falls 3.65 per cent. 1900 Loan, less the redemption of $20,674.52 of overdue stock. The sinking funds were increased during the year $300,000.

EDUCATIONAL.

It would exceed the limits of this book to enter into a description or even an enumeration of the hundreds of public institutions which peace and prosperity have bestowed upon Baltimore. It should be mentioned, however, that it has a large free library with several branches. The Peabody Institute has one of the finest libraries in the world, accessible to all who wish to consult its catalogue. The public school system is such that the highest education may be obtained free. From the City College, graduates may step to the Johns Hopkins University, with opportunities for winning scholarships.

From the Enoch Pratt Free Library as a central point strike a circle within a radius of half a mile. Within that circle will be found libraries that include in all about 400,000 volumes, and a group of colleges and professional schools with not less than 3,500 scholars, exclusive of students in private and "grammar" grade public schools.

CHAPTER VI.

THE SUN.

Perhaps no influence has been more steadily directed to the business and industrial development of Maryland than the Baltimore Sun, founded in 1837 by the late Arunah S. Abell, and now published by Edwin F. Abell and George W. Abell, his sons. Mr. Abell, who was also one of the founders of the Philadelphia Public Ledger, was thoroughly imbued with the spirit of progress. He was one of those representative mechanics—far seeing—with definite objects in view—from the pursuit of which there was no swerving during a long lifetime of successful achievement. His main purpose was the cheapening of newspapers as a means of widely diffusing intelligence and enlightening the working body of the people on whom the substantial prosperity of the country depends. Secondly, with the cheap newspaper as the agency, he foresaw the possibilities of unlimited development for the country. During the fifty-six years which have elapsed since The Sun was established, the population of Baltimore has grown from less than a hundred thousand to five hundred thousand. From a small commercial—but always an active and energetic commercial city—it has developed into a great manufacturing and commercial emporium. Every avenue to this magnificent development has been illuminated by The Sun. At a time when those who had prospered in commerce were content to keep solely to commercial lines, this paper lent its growing influence to the encouragement of manufacturing as the great reliance of commerce, and it has been from the start the leading paper of Maryland and the South.

THE SUN OFFICE, BALTIMORE, MD.

THE SUN was a steady friend of the Maryland Institute for the promotion of mechanic arts, the exhibitions of which thirty-five and forty years ago had a wonderful effect in advancing industries in the city.

So, too, the first suggestion for a world's fair to celebrate the 400th anniversary of the discovery of America by Chrisopher Columbus, was made by the Baltimore SUN, January 2, 1882, the idea then being that it would take ten years to make the necessary preparations. THE SUN'S suggestion was to hold the fair in Baltimore; then Washington city was urged, and Congress finally settled the question in favor of Chicago.

Passing through its own various stages of development in keeping with the pace and progress of the city of Baltimore, THE SUN on the 23d of May, 1892, appeared in its present form of eight or more pages, daily and weekly, for which a new equipment of fast perfecting presses and other highly improved machinery was necessary. These new presses are the fastest and most complete for all the exigencies of the modern daily newspaper, whose burthen of world-wide intelligence must be quickly conveyed to constantly increasing numbers of readers, and they are at the same time but a step further forward in the progress of this remarkable era, when the printing press is in fact the pulse that beats to the time of an ever-advancing civilization. By reason of vastly increased circulation it is necessary for THE SUN now to use two presses which will print 192,000 single sheet papers (four pages) or 96,000 double sheet papers (eight pages) in an hour. The change affords an increase in space in the ordinary edition equal to nearly five columns of the larger page previously published, while at any time the number of pages may be increased to as many as thirty-two, if necessary, so that the largest demands, both of news and business, may be accommodated.

Though changed slightly in form to better suit the convenience of the reader as well as to secure all the advantages of rapid press work, the time-honored features which individualize THE SUN have not been altered. There is no change in the style of the paper; it is THE SUN still, preserving its method of classification so valuable to readers, because it enables them to find what they want without trouble. But in other respects limitations or restrictions cannot be put upon enterprise which seeks to give the news and always intends to give it truthfully, as well as to comment on it fairly and fearlessly.

It can be claimed for THE SUN that it has kept pace with the progress of an age in which the press has become a leader in thought and enterprise. Its independence and devotion to the best interests and the greatest good of the greatest number need no assertion; those attributes of honest journalism assert themselves, and will continue to be ever guiding and controlling principles. The phase of its career which the paper has now entered upon is a continuation of those methods of legitimate and enterprising journalism which have established THE SUN in the confidence of the people both for what it says and for what it thinks. There could be no higher aim than journalism founded on such a basis, and it will be the endeavor of the publishers to keep up to the highest mark, and at the same time to widen and broaden their enterprises in keeping with the magnificent opportunities which make this country the wonderland of development in ever department of human endeavor.

THE SUN JOB OFFICE.

To maintain its place at the head of the job printing houses in the South, THE SUN Book and Job Printing Office has undergone radical improvements and costly additions to its already large facilities. Four splendid

new Hoe cylinder presses of the latest design and highest effectiveness were put in during the year 1892, and thousands of pounds of type, including the best material for every description of printing, were added to the equipment of the establishment. The new machinery, in addition to the regular complement of a first-class office, does not include six Gordon job presses, which are also busily at work in THE SUN job press-room.

One of the large new presses is the Patent Stop-Cylinder machine, designed to do the finest description of book work and picture printing from black plates or colors. It will print with a delicacy of impression and accuracy of register unsurpassed by any other machine. The press is next to noiseless in its motion, yet by use of a lately perfected cam device the speed is quickened greatly over that of other presses of similar design, while there is no detriment to the press or to the quality of its product. Another of the new machines is a patent Two-revolution, Four-roller Cylinder Press, intended specially for illustrated newspapers, periodicals and rapid book work, which it turns off at a high rate of speed with accurate register and excellent distribution of ink. The press takes its name from the fact that the cylinder makes two revolutions to each run of the bed, rising to let the bed run back. This machine runs on newly patented air springs and is noiseless in its work. A patent news and job cylinder press is another of the new machines. It has the drum cylinder and turns off at a rapid speed the best class of job and stationery work, and does it noiselessly, as its bed also runs upon air springs and its fly works without sound. The sheets are not delivered by tapes, which are apt to smear the paper, but the fly takes the finished work directly from the cylinder and deposits it upon a table. The Pioneer large cylinder press is the last though not the least of the quartet. It will do

in the best manner newspaper, job and poster work. Like the others named, the newest appliances are used in all its parts to save time and labor to the pressman and to facilitate promptness in finishing a job of printing. The new type outfit contains all the newest and handsomest faces that could be gotten together for every sort of fine book, job, news, catalogue and advertising work. With this there is a large assortment of poster type, and there is nothing in the printing line, however large or small, that cannot be executed in the handsomest style through the new facilities of THE SUN Book and Job Printing Department.

THE SUN OFFICE, WASHINGTON, D.C.

CHAPTER VII.

BALTIMORE CHRONOLOGY.

A summary of some of the leading events in the history of Baltimore will be found in chronological order as follows:

1776—Dec. 20—The Continental Congress assembled in Baltimore, and on the 27th first invested Gen. Washington with dictatorial powers.

1784—Peter Carnes made the first balloon ascension in the United States from Howard's Park.

1784—December 27.—The first Methodist Episcopal Church in the United States was organized in Baltimore, and here Rev. Thos. Asbury was made the first bishop of the Church in America.

1790—August 15.—Rev. John Carroll, of Baltimore, who was appointed the first vicar-general of the Catholic Church in America in 1786, was consecrated the first Catholic bishop of the United States. In 1808 he was made the first archbishop.

1792—The Baltimore Water Company, the first of the kind in the United States, was formed.

1808—Major George Peter organized the first horse artillery at Fort McHenry, Baltimore.

1810—Peregrine Williamson was granted a patent for metallic writing pens, the first of the kind manufactured in the United States.

1813—"The first marine artillery of the Union" was organized at Fort McHenry, Baltimore.

1814—The defeat of the British before Baltimore by its citizen soldiers was the first of a brilliant series of events in the war of 1812 that brought about peace.

1815—July 4.—The corner-stone of the first monument erected to the memory of George Washington was laid.

1815—Sept. 12.—The corner-stone was laid of the Baltimore Monument, to the memory of those who fell in defense of the city in the war of 1812-14 with Great Britain.

1816—June 17.—"The Gaslight Company of Baltimore" was the first company organized in the United States to manufacture gas for street and general use.

1819—April 26.—The first lodge of Odd-Fellows in the United States was formed in this city by Thomas Wildey and several others.

1827—April 24.—The Baltimore and Ohio Railroad Company was the first railroad company organized in the United States.

1828—The Methodist Protestant denomination was founded.

1828—Ross Winans first invented "the outside bearing" to railroad carriages, which is now the only bearing used throughout the world.

1828—December 10.—The first American patent for a locomotive was taken out by Wm. Howard, of Baltimore.

1829—The first silk ribbons made from American silk were made in Baltimore.

1830—January.—The first car ever propelled by a sail was run on the Baltimore and Ohio Railroad.

1830—August 28.—Peter Cooper made the first journey in America by steam car from Baltimore city to Ellicott's Mills and return. This distance—thirteen miles—was made in 57 minutes.

1831—December 12.—The first national republican or whig convention assembled in Baltimore, and nominated Henry Clay for president and John Sergeant for vice-president.

1832—May 21.—The first democratic national convention was held in Baltimore, and nominated General Jackson for re-election as president. Martin Van Buren was nominated for vice-president.

1833—The Improved Order of Red Men was first founded in Baltimore.

1838—May 20.—The first regular steam vessel that crossed the Atlantic from the United States direct was the steam packet "City of Kingston," Capt. Crame, which steamed from Baltimore. In 1837 and 1838 Baltimore was the first to build two wholly iron steamboats, the "Mary Summers" and "De Rosset," at the works of Watchman and Bratt, south side of the basin, for river navigation in Georgia and South Carolina. (See Baltimore Sun Supplement, Nov. 3, 1884.)

1839—The Baltimore College of Dental Surgery was incorporated, being the oldest in the world.

1844—The first electro-magnetic recording telegraph line in the United States was established by Prof. Morse between Washington and Baltimore. The first experiment was made April 9, and the line completed May 24.

1844—The Sun was the first newspaper in the world to make use of the electric telegraph.

1846—May 11.—The first presidential message ever transmitted by telegraph was exclusively sent to The Sun.

1848—November.—George B. Simpson exhibited in Baltimore the first successful submarine telegraph, the one now in practical use by all telegraph companies.

1850—May.—The Independent Order of Red Men of the United States was first organized in Baltimore.

1851—The Sun Iron Building was the first cast-iron building in Maryland, and the first iron newspaper building in the world.

1853—The first Hoe type-revolving cylinder presses successfully used in the United States were introduced in The Sun building.

1860—May 8.—The first national constitutional Union party convention was held in Baltimore, and nominated John Bell, of Tennessee, for President, and Edward Everett, of Massachusetts, for Vice-President.

1860—June 18.—The first split in a national democratic convention took place in Baltimore on the 22d of June, and on the following day the seceders nominated John C. Breckenridge their candidate for President, and Joseph Lane for Vice-President. The regular convention nominated Stephen A. Douglass for President.

1861—April 19.—The first blood shed in the late civil war took place in the attack on the Sixth Massachusetts Regiment by the citizens of Baltimore, when four soldiers and twelve citizens were killed.

1862—Horace Abbott, at the Canton Iron Works, rolled the iron armor plates for the first "monitor" built in the United States.

1867—November 27.—The Order of the Knights of Pythias was instituted in Baltimore.

VITAL STATISTICS, BALTIMORE, 1892.

WARDS.	*Population.	Total deaths.	Death rate per 1,000.	Dwellings.
First,	23,474	536	23.30	4,235
Second,	19,415	577	30.37	2,511
Third,	16,318	360	22.50	2,770
Fourth,	16,400	309	19.31	2,821
Fifth,	15,670	345	21.56	2,864
Sixth,	28,145	788	28.14	5,541
Seventh,	25,739	575	22.11	5,832
Eighth,	26,682	571	21.15	4,740
Ninth,	16,882	521	30.64	2,154
Tenth,	16,147	335	20.94	2,654
Eleventh,	21,269	467	22.24	3,821
Twelfth,	25,426	556	22.24	5,595
Thirteenth,	15,026	415	27.66	2,571
Fourteenth,	18,062	402	22.33	3,402
Fifteenth,	15,141	344	22.93	2,392
Sixteenth,	14,838	371	24.73	2,533
Seventeenth,	26,483	637	24.50	4,291
Eighteenth,	27,487	649	24.03	5,218
Nineteenth,	25,458	537	21.48	4,083
Twentieth,	20,610	493	23.66	4,871
Twenty-first,	16,428	323	20.19	3,334
Twenty-second,	24,327	471	19.62	5,375
Totals,	455,427	10,582	23.25	84,247

*Police Census, 1890.

CHAPTER VIII.

AGRICULTURAL CONDITION.

The latest statement of the agricultural condition of Maryland and the needs of the State in this particular, are given in a report by Mr. A. B. Howard, Jr., Chief of the Bureau of Industrial Statistics. The following summary has been made up from the details furnished by this report. The conclusion to be drawn from the facts supplied is that Maryland offers many inducements for settlers. Good labor is everywhere in demand to begin with, and land is cheap and to be had in tracts of any size from an acre upwards. The progressive agriculturists are everywhere getting out of the old ruts and turning their attention to those branches of farming which pay better than the raising of a few staple products exclusively. The farming of the State is becoming more and more varied every year, and dairying, stock-breeding, poultry raising, sheep raising, packing and other industries are being profitably combined with agriculture. In this way Harford, Carroll, Frederick and some other counties have taken the lead of the others in canning tomatoes, corn and other products, while in some of the counties small fruit growing and peach packing are followed to a considerable extent. The migration of the negro element from the country to the towns tends to break up the large estates into small ones and clear the way for immigrants and other new settlers who desire cheap and fertile land, with congenial social surroundings.

For the purpose of geographic description, the natural divisions of Maryland are here classified in the same way as for its climatic description, viz: into the

divisions of Eastern, Southern, Northern-Central and Western Maryland.

EASTERN MARYLAND.

The counties of Eastern Maryland are as follows:

Worcester,	Dorchester,	Queen Anne's,
Somerset,	Caroline,	Kent,
Wicomico,	Talbot,	Cecil.

These Maryland counties with the State of Delaware and two counties of eastern Virginia form the Peninsula, which is widely known for its peach-growing industries and numerous other profitable pursuits.

Worcester is the only county of Maryland which touches the Atlantic Ocean. The coast is a sand-barrier, inside of which is Sinepuxent Bay and Chincoteague Sound. The whole region offers many inducements for enterprise and development, the natural resources being timber, fisheries, facilities for oyster planting, and a soil and climate wonderfully adapted for the early production of small fruits and vegetables. Worcester and Caroline are the only counties of eastern Maryland which do not touch the Chesapeake Bay. All the other seven counties have the Chesapeake for the western boundary, while the Delaware line runs straight down the Peninsula.

The Eastern Shore is uniformly level, with good roads which are easily kept in proper condition, and cheaply. The land is deeply indented by tidal estuaries. The proximity of the ocean and the bay greatly modifies the temperature. Tidal estuaries, "creeks," as they are generally called, and larger streams are so numerous that in some parts of the region there is a water approach to a majority of the farms. Living is so cheap, and oysters and fish so abundant that labor is unreliable and hard to keep at regular and systematic employment. Desirable settlers, who would make use of the

abundant opportunities that exist for development, would be gladly welcomed nearly everywhere.

In Worcester county, settlers are wanted and tracts of land, in sizes to suit, can be had in great numbers. Not more than one-fourth of the land is worked by the owners, the balance under cultivation being rented.

About one-half the land under cultivation in Wicomico county is worked by the owners. Fairly good land may be had for $10 an acre, and there is an abundance of it to be had. Salisbury, the county seat, is one of the most enterprising towns in the State. The annual volume of its mercantile business is over a million dollars, and it is the site of some extensive manufacturing establishments.

Talbot county farmlands contiguous to water bring $40 to $60 an acre, while those at a distance from water may be had at $30 to $50. Practically all the suitable land is under cultivation in Talbot and two-thirds of it is worked by the owners.

Somerset county has a great deal of uncultivated land, which could be had by settlers on easy terms.

About half the land under cultivation in Queen Anne's county is worked by the owners and the rest is rented.

The farms in some parts of Kent county are too large, and industrious settlers with small capital could easily divide them. Such settlers would be welcomed.

Marl is found in large quantities in Dorchester and it possesses fine fertilizing qualities. There is much marshland which is given up to grazing cattle. Lands may be bought in tracts of twenty acres and upwards at low prices, and on easy terms. Cambridge, the county town, has ship building and other industries, and is one of the most beautiful places in the State.

Land may be bought in Caroline county as low as $10 or $15 an acre. Great industrial progress has been made in Caroline in recent years.

Cecil county stands in need of a greater population. There are unused lands which might be acquired reasonably. The manufactures of Cecil are important. Among the industries are rolling mills, forges, blast furnaces, paper mills, flour mills, fire-brick, kaolin and pottery factories.

SOUTHERN MARYLAND.

The surface of the land in Southern Maryland is somewhat higher and more broken than in Eastern Maryland. The counties which compose this tobacco growing section of the State are:

St. Mary's,
Calvert,
Charles,
Prince George's,
Anne Arundel.

Perhaps no part of the State offers greater opportunities for development or inducements to settlers than are to be found in these five counties. Besides woodland, about one-third of the land in St. Mary's county is untilled and much of it is badly worn. There is also a large amount of land held in large tracts uncultivated because the owners are unable to work it to advantage. The price of much interior lands is merely nominal. Some of it may be bought for $3 or $4 an acre, while land contiguous to water may be had for $10 to $30 an acre. Along the water there are many farms containing 400 and 500 acres. Settlers desiring to locate will find plenty of land at a low figure, and those without sufficient capital to buy, can rent upon easy terms. The county offers good inducements to colonies.

Chief Howard, of the Bureau of Statistics, in his report for 1893, says: "Calvert county—Many natural advantages commend it to persons who desire homes in this section of the State. The farming lands are in really good condition, though, owing to the sparseness of the population, only to a small extent improved.

Land thickly wooded with well grown pines, poplar, hickory, oak and gum timber is to be obtained at low rates, and when cleared is very productive. This land can be obtained at about $2 an acre, while good cleared lands, which are very productive, are sold at from $4 to $10 an acre. The best river bottom farm lands, the finest in the country, can be bought for $20 an acre." The greater part of the county is unimproved, because the farmers are unable to cultivate more land than has already been cleared. There is great need of population, and industrious settlers would be gladly welcomed. The chief mineral deposits of Calvert county are iron ore and silica, the latter being very profitable and of superior quality.

It is estimated that at least 30 per cent. of the land under cultivation in Charles county, in 1860, is now idle, due chiefly to the unreliability of local labor. About a third of the farmlands of Charles county are worked by the owners, and reliable labor is always in demand. There is an abundance of well watered timber land which could be purchased at low rates and on easy terms by settlers. In Charles as well as in Prince George's and other counties of Southern Maryland, marl is found in large quantities.

In Prince George's county the land holdings are still large, and about one-half of the total area is untilled. The subdivision of farms and an influx of settlers is greatly desired. It is stated on State official authority that "Every inducement is presented by the county for those who would be in a position to buy small farms. The taxes are low, good educational facilities are afforded, and land can be obtained in almost any sized tracts, on very reasonable terms. The needs of Prince George's are an increased population, a greater number of land owners, as distinguished from renters, and a better class of laborers."

Anne Arundel, in which is situated Annapolis, the capital of the State, has a great variety of soil and important mineral deposits, including valuable porcelain clays and glass sand. Farming is largely devoted to raising fruits and vegetables. In the northern part of the county the price of land ranges from $50 to $200 an acre, while in other sections it is in some cases as low as $5 an acre. The average price is about $30. There is a great deal of untilled land and the proportion of woodland is about one-third of the county. The supply of labor is never equal to the demand. Chief Howard, of the Bureau of Statistics, says: "Lands can be purchased by immigrant settlers in tracts of from one acre to 1,000 acres." Many portions of Anne Arundel county are identical in soil with the famous small fruit-growing county of Cumberland, New Jersey, in which is situated Vineland. The climate of Anne Arundel is more favorable than that of Cumberland county, N. J., and offers special inducements to fruit growers, and the location is such that there is a choice of excellent city markets.

WESTERN MARYLAND.

The western section of Maryland, wedged in between Pennsylvania and the Virginias, is the hill country of the State, where bituminous coal gives a stimulus to industry, and where manufacturing operations as well as prosperous farming are carried on extensively. The counties composing this division of the State are:

Allegany,	Washington,
Garrett,	Frederick.

Western Maryland has a succession of parallel ranges of mountains with deep valleys, which drain chiefly into the Potomac river. The mountains reach 3,000 feet and more in altitude, and in the west rise from a high plateau, which declines gradually beyond the limits of the State.

Ten per cent. of the area of Garrett county is yet covered by virgin forests, and not more than a small part of the cleared land is under cultivation. There are no worn out or abandoned lands in the county. Lumber mills are numerous. Part of the George's Creek coal basin is in Garrett, and there are other coal measures, but in agriculture is thought to be the future source of its wealth. Settlers will find a far more moderate climate in Garrett county than in the west or northwest. They will also find cheap land and rich soil. Sheep raising has already become an extensive and profitable industry. The maple sugar industry is also largely prosecuted, the average annual crop being about 250,000 pounds. The resources of Garrett in timber, coal, iron ore, fire clay and lime stone are inexhaustible.

The chief source of wealth in Allegany county is its coal fields. Cumberland, the county seat, is an industrial centre, having steel works and iron works, furniture factories, cement works, lumber mills, glass factories, machine shops, extensive tanneries and many other large industrial establishments, including potteries, fire brick works and the manufacture of ornamental tiles. Agriculture forms but a limited part of the productive employments of the people. Statistician Howard's report for 1893 says:

"About two-fifths of the area of Allegany county is woodland. This woodland, if divided into small holdings, would open up a vast area upon which immigrants might settle with profit to themselves and to the county and State. A great deal of the mountain land is used for grazing purposes. German and Scotch immigrants are much desired, and they would find every facility for their comfort and convenience at hand. The present owners would be willing to divide the land into almost any sized tracts, and purchasers by taking one-half woodland could buy it for about six dollars an

acre. A great many farmers are anxious to dispose of a portion of their holdings, as they find their farms too large."

It is claimed that Washington county has more miles of turnpike roads than any county in the United States. Besides this, it is traversed by many lines of railroads. Hagerstown, the county seat, and the seat also of much actively employed and safely invested capital, has competing lines of railway to every important place in the country. Manufacturing industries are machine works, wagon factories, bicycle factories, steam engine and boiler works, spoke and rim factories, paper mills, silk ribbon works and other textile manufacturing establishments. Washington county is a limestone region; the land is rich and the wheat crop is large. Great attention is paid to the cultivation of fruit apples, grapes, cherries, plums and peaches. The fruit is all superior and commands good prices. Within the past few years it was developed that a belt of land extending along the foot of South Mountain is peculiarly adapted to the growth of fine peaches. The consequence has been the immediate establishment of peach orchards throughout the mountain region, where land, which previously would not have sold for $5 an acre, has advanced to $50 and even to $100 an acre.

Frederick is the richest, agriculturally, of the counties of Maryland. Very little or none of the land is uncultivated. It is the leading wheat-growing county in the State, and it has some of the best stock farms in the country. Dairy products, sheep raising, hog raising, poultry breeding and other similar industries give constant employment and variety to the farm life. Good labor is in constant demand. Among the manufactories of the county are numerous flour mills, tanneries, distilleries, iron furnaces, woolen mills, lime kilns, brick kilns, brush factories and some of the most extensive vegetable packing establishments in the United States.

Frederick city, the county seat, is an old and important town, from which an electric railroad line is projected to connect with the Middletown Valley and on through to Washington county. Frederick is also solid financially and enjoys a large trade with an important back country. Its manufactures are growing in number and variety every year. In the whole county there are 151 public school houses and 140 churches.

NORTHERN-CENTRAL MARYLAND.

Under the heading of Northern-Central Maryland may be grouped five counties, as follows:

Baltimore County, Howard,
Carroll, Montgomery.
Harford,

Baltimore county is a separate political subdivision of the State, independent of the city, but indebted to it for much that gives it importance. Indeed, it may be said that its importance is due chiefly to the overflow of population from the city, and to the industrial enterprises which city capital has established. Many charming situations have stimulated suburban development, until the city is girdled with an ever-widening belt of villages. Steam and electric railroads supply the means of rapid inter-communication, and on some of these lines many miles of suburban homes extend continuously. The country is elevated and healthy and some of the villa sites are amidst highly picturesque surroundings. Development is going on all the time, because the city is growing all the time and expanding its industries. There are paper mills, cotton factories and other industrial establishments of magnitude, together with large breweries and distilleries. It goes without saying that in territory so close to a great metropolis, there is a never-ceasing demand for farm products, so that Baltimore county farmers on the north have the advantage, as Anne Arundel producers

have on the south; of a market always near at hand in Baltimore City. Towson, the County Seat, is a thriving and go-ahead town, where three flourishing weekly newspapers are published.

In Carroll county dairy farming and stock raising are carried on very extensively. Among the manufacturing industries are a number of tanneries, distilleries, paper mills and various other mills, factories, foundries, machine shops, fruit, vegetable and hay-packing establishments. Extensive areas of the county are occupied by old German settlers. Among these the farms average about forty acres. The population is thrifty and the vacant land will hardly exceed one-tenth of the total area.

There are 500 fruit and vegetable packing houses in Harford county, where the annual output of canned goods is, in favorable seasons, enormous. Organized effort is contemplated to induce settlers to locate in large numbers. Large tracts of land cannot be had, but small farms of 60 to 150 acres can be purchased at low price. The land has a good many of the characteristics of Southern Pennsylvania, which it adjoins. The country is rolling and well adapted to raising horses, cattle and sheep. Dairy farming is profitable. Among the manufacturing industries are paper mills and other factories. There is a large shoe manufactory at Havre de Grace, where ground and exemption of plant from taxation are offered to encourage manufactures, and where plenty of orderly labor is to be had.

Howard county, like many other counties in the State, needs increased population and infusion of capital, improved labor, and subdivision of the larger farms into small holdings, to bring them within the reach of desirable and enterprising settlers. There are many good opportunites for making a comfortable living and laying up savings. There are some large cotton mills among the industries of the county; also extensive flour mills, electric light works and other industries.

Montgomery county, bordering the District of Columbia, is largely used for residence by persons doing business in Washington City. There are several electric and steam railway lines affording every transportation facility. In recent years numerous thriving settlements have been established close to the District of Columbia line, where desirable homes may be had at reasonable prices. The Great Falls of the Potomac in Montgomery county are capable of supplying immense water-power for manufacturing and producing electricity. Glen Echo, near Cabin John Bridge, has an immense auditorium for Chautauqua assemblages. The building is one of the largest places of popular gathering in the United States.

RICH MARSH LANDS.

"There are many large tidal marshes in Maryland, the reclamation of which would be very beneficial to the public health and add millions to the general wealth of the State. Thousands of the most fertile acres could, with little comparative expense, be brought into the highest state of productive cultivation." This is the opinion of experts who have investigated the marsh lands of Maryland at the instance of the Department of Agriculture in Washington City. That there should be a vast area of such lands in territory watered like Maryland, is to be expected. That they should be of the richest soil to be found, is because "the Chesapeake bay is a great river valley," receiving the drainage of a vast area of fertile land. This drainage every year brings down a black sediment, which makes in the bay and its tributaries what is known as "oyster mud," and leaves deposits on the marsh lands that continually enrich the soil. These conditions not only contribute to the development of the oyster in the waters, but they make land which if properly utilized would exceed in productiveness any now under cultivation.

In Worcester county there are many thousand acres of tide marshes on the mainland, bay shores and creeks, none of which have been diked, the tidal action not being sufficient to secure drainage through sluices for marshes that are near the level of mean high water, without the use of machinery for raising the drainage water. There are great marshes on the Pocomoke river, however, to which this objection does not apply.

Somerset has about 25,000 acres of marsh land and the tidal action is sufficient for drainage. The taxation is about twenty-five cents an acre. Wicomico county has several thousand acres of marshes, mainly on the Nanticoke river, all unreclaimed. There are over 5,000 acres of tidal marsh lands on the Nanticoke river in Dorchester county, at a general elevation of 3½ to 4 feet above low water. The common rise of the tide is 3½ feet. The marshes are used for grazing; they are valued at $1 to $5 an acre; upland $6 to $30.

The low marshes in this section produce wild oats, and lower down on the Nanticoke river other grasses. An attempt was once made to reclaim the Nanticoke marshes above Vienna for cotton and rice, but it was abandoned. On the upper Choptank, Caroline county has about 1,000 acres of tide marsh sufficiently elevated to afford perfect drainage, and none is diked. The land is used only for grazing and is valued at $2.50 an acre.

Mr. D. M. Nesbit, of Prince George's county, who prepared the report for the Agricultural Department on Maryland marshes, says: The marsh land of Talbot county is equal to any in the world, and it could never be worn out. Talbot has a large frontage on tide water and contains many thousand acres of marsh land that could be reclaimed at moderate cost and made very valuable, but that so far none has been diked. The lands are chiefly alluvial, six to eight feet. Common tide rises three feet. The natural vegetation is a coarse cane grass, reed, flag and rush. On the east the Chop-

tank and Tuckahoe marshes are nearly a mile wide, narrowing as the streams are ascended. The salt water streams, such as Tred-Avon, Miles and Wye, have no marsh, but solid shores with verdure to the water's edge.

Kent county has marshes that could be made very valuable. In Cecil county no attention has been paid to the marshes, except on the Sassafras, where a few acres were banked from the tide, but the muskrats invaded it and the bank was allowed to go down. Harford county has perhaps 15,000 acres of tide marsh on the Susquehanna, Bush and Gunpowder rivers. The elevation above low water is 1 to 2½ feet, and the common tide rises 3½ feet. The marshes are chiefly alluvial, with clay or sand sub-soil; depth, 4 feet. The vegetation is coarse grasses. No attempt has been made at reclamation.

In Southern Maryland the tide marshes are capable of being made valuable productive lands; but none have been diked or reclaimed. There is an immense marsh area along the Patuxent. Calvert has extensive marsh areas. The marshes of Prince George's are formed in the bends of the rivers. They are covered with wild oats and grasses, which fatten cattle very fast. The grazing is good also in the marsh lands of Charles county, where tracts may be bought for $3 an acre. St. Mary's county, a peninsula, nearly surrounded by tide water, contains large areas of unimproved marshes.

Next to the cultivation of oysters, on a broad plan, there is in the diking, reclamation and cultivation of Maryland marshes, a source of wealth that cannot be overestimated, and of revenue to the State that cannot be measured.

A NEW ERA IN FARMING.

To sum up the agricultural condition of Maryland in 1893, it may be said that a change has already set in, both in regard to the character of the labor and the methods employed by farmers. Negroes have to a large

extent abandoned the fields and flocked to the towns and cities. The white man is doing the farming, and it is expected that immigrants, if they come at all, will come chiefly as freeholders, not as farm laborers. They will do their own work. They will diversify their crops, adapting their agriculture to the needs and opportunities of a region within reach of four big cities, and abandoning the hopeless competition with the wheat and corn fields of the West. Indirectly, however, by reciprocal help in seedtime and harvest, they will solve the labor problem for the communities in which they settle. They will help each other, and the drifting of negro labor to the towns and cities will cease to paralyze agriculture in Southern and Eastern Maryland.

At the bottom of the whole trouble in these sections is the fact that the civil war destroyed the organization of labor upon which the large farms were dependent for successful cultivation. The war gave the disorganized units an opportunity to set up for themselves as farmers, but they have not, as a rule, accepted it, preferring menial service and desultory employment in the towns.

The field is thus cleared for newcomers of a different race who have the European longing for land and love for rural life. In other words, the conditions that make the West and Northwest attractive to German and Swedish immigrants—cheap land and a congenial social environment—are being established here in Maryland, as is indicated by the fact that 2,400 foreign immigrants voluntarily settled in the State during the year 1893, without any effort having been made by State or other agency to induce them to swerve from the tide that annually flows westward.

Land-owners have found it more and more difficult to cultivate large tracts of land, and they must therefore from force of circumstances divide their estates and sell portions of them to newcomers. The details furnished

above from each county and section of the State show that much of this land may be secured by desirable settlers. They exhibit, also, the quality of the soil and give some idea of the cheap rates at which land may be secured. Under the old system of large farms, farming had ceased to be a remunerative business, but it is the merit of the proposed promotion of immigration that it contemplates the introduction of new capital, new men, new enterprise and new ideas, to the benefit of all concerned.

It has come to be realized that farming, to be successful, must be intelligent farming. To promote attaining the highest type of farming, Maryland has a State Agricultural College and an Agricultural Experiment Station, in Prince George's County, which are doing good work, the one in training the young and the other in supplying information for the guidance of the agriculturist. The intelligent farmer of to-day is simply making use of certain scientific facts that possess a practical application. The experiment stations have become schools of the most practical nature. The good accomplished in bringing about an era of better farming is due directly to the experiment stations and to the coming of the white man to the practical work of agriculture in these times.

A GOOD LAND TO LIVE IN.

Maryland stands as high as any other State. But its true wealth of products needs to be made as well and as widely known as those of some other States. It is the "land of the forest and the rock," of "broad blue bay and mighty river," and there are fortunes in the forest and the rocks and in the broad blue bay and the mighty rivers, while its genial soil responds liberally to every demand that intelligent labor can make upon it. What a showing of ores, coals, woods, cattle, horses, grains, fruits and flowers might be made! All the products of the tem-

perate zone, with some of the semi-tropical fruits, are brought forth in the greatest abundance in every section of the State. Those who wander in summer amidst its mountains are refreshed with its lovely scenery of wood and field. Nothing can excel its charming landscapes, for everywhere the useful is blended with the beautiful: the forest with the crag and the quarry, the rugged mountain side with the fertile slope, the rushing waters with the green pastures. Here nestles a pretty village and there a thriving town; here a mill and there a furnace or a factory. Down where the State is flanked by the Potomac on one side and the Delaware on the other, and where the beautiful Susquehanna makes its way into the Chesapeake Bay, the scenery is a grand panorama of luxuriant farms and orchards, of winding streams and deeply shaded woods. From the mountains to the sea the State has been blessed by nature with all that can please the eye and command the admiration of man. To these attractions let us add those which are suggested by the presence of a refined and hospitable population, living amidst all the conveniences which a progressive age has given them, quick transportation by rail and steamer, public and private schools without superior, churches of every denomination, the two great markets which Baltimore and Washington afford, to say nothing of the vicinity of the larger cities further east or the smaller ones within and near the borders of the State.

Thus, "in a nutshell," we have a summary of the physical and moral characteristics of Maryland. The prudent man in search of a home free from the ordinary vicissitudes of the settler in a new country, the farmer who seeks a better living nearer to the great markets of the east, the capitalist who would establish industries where mines and forests, railroads and rivers and abundant labor all combine to promote his purposes, might travel the whole country over from ocean to ocean and he would fail to find a better, brighter, purer land to live in than "Maryland, My Maryland."

STATE HOUSE, ANNAPOLIS, MD.

CHAPTER IX.

MARYLAND DAY.

Maryland Day at the World's Fair, Chicago, September 12, 1893, was selected because it was the anniversary of the Defense of Baltimore from the British attack in 1814, and also in commemoration of the birth of the National Anthem, "The Star Spangled Banner," which was inspired by the bombardment of Fort McHenry. The programme arranged for the celebration at Music Hall on the fair grounds was as follows:

Prayer—James, Cardinal Gibbons, Archbishop of Baltimore.

Introduction—Frank Brown, Governor of Maryland.

Recitation—Star Spangled Banner, Miss Martha Ford, of Baltimore.

Oration—John V. L. Findlay, of Maryland.

Benediction—James, Cardinal Gibbons, Archbishop of Baltimore.

Distribution Souvenir book on Maryland—By The Sun, Baltimore.

More than three thousand people, nearly all of them representative Marylanders, including a large proportion of ladies, gathered in Music Hall to assist in these ceremonies. It was a splendid, an enthusiastic and a patriotic assemblage. All parts of the State were well represented, and there were a number present of descendants of Marylanders, who had settled in the West. The body of the hall was reserved for the veterans of the Grand Army of the Republic from Maryland, under Commander Frank Nolan. These veterans carried the flags of the State and of the Union, and headed a procession in which the Governor and his Staff, the orator of the day and other participants rode in carriages

through the fair grounds from the Maryland Building to Music Hall.

On the platform were Governor Frank Brown and his Staff in full uniform, as follows:

Adjutant-General H. Kyd Douglas; Generals Alexander Brown and Clinton P. Payne; Colonels James A. Preston, Chas. H. Carter, Sherlock Swann, John Pleasants and Gerard L. Hopkins.

The City of Baltimore was represented by Mayor Ferdinand C. Latrobe, Judge J. Upshur Dennis, States' Attorney Charles G. Kerr, City Commissioner Alfred E. Smyrk.

The Maryland State Commission for the World's Fair was represented by Gov. Brown, Mayor Latrobe, Murray Vandiver, David Hutzler, Frank N. Hoen, J. Olney Norris, and Executive Commissioner George L. McCahan.

Others on the stage were: Orator of the day, Mr. John V. L. Findlay, who was also the Maryland Day orator at the Centennial Exposition, Philadelphia, in 1876; Miss Martha Ford, daughter of Mr. John T. Ford, of Baltimore; Hon. Lloyd Lowndes, of Allegany, and Secretary of State William T. Brantly.

Behind the officials, dignitaries and other participants in the ceremonies was stationed the Iowa State Band, which had been specially equipped with a repertoire of Maryland music. The band began the ceremonies with the Armistead March, composed by Prof. James N. Deems, of Baltimore.

When they struck up "Maryland, My Maryland," playing it with some variations which were new to the audience, it brought forth generous applause and excited the large and splendid assemblage into enthusiasm. All the pieces on the musical programme had some interest for Maryland. It was, in fact, a delightful feature of the day. Among the compositions was the "Tar and Tartar" medley, by Adam Itzel, Jr. Mr. Thomas F.

McNulty, who has a clear tenor voice, electrified the assemblage with a new version of the song of "Maryland, My Maryland," which he sang at the end of the programme, and which was an unexpected event.

As the ceremonies progressed the assemblage warmed with Maryland music, Maryland poetry, Maryland oratory and Maryland patriotism, making the celebration distinctive in every way, and a great credit to the State. The national song of the "Star Spangled Banner" had vocal as well as musical rendition—vocal in the beautiful recitation of the lines by Miss Martha Ford, whose voice was equal to the task of reaching every part of the house with great effect. The reading gave to many persons new ideas about the sonorous and vigorous lines of the poet. Every verse seemed to impart a fresh meaning, and the audience listened with intense interest, bursting into applause at the conclusion of every verse. When it was all over Miss Ford was surrounded by gentlemen on the stage and enthusiastically congratulated. The first to come forward and shake her hand was the Cardinal, and then the Governor and many others near by. The band rendered "The Star Spangled Banner" in fine style to finish up the brilliant performance of the young lady.

The part filled by THE SUN in the programme was one of the interesting incidents of the celebration. This was the distribution of a handsomely printed and illustrated book on the "Resources, Industries and Agricultural Condition of Maryland, 1893." The book was the first edition of the present publication, especially prepared for the occasion by the publishers of THE SUN, and it proved to be a very acceptable souvenir of the World's Fair. A large edition was distributed. Every person in Music Hall received a copy, and hundreds of other copies were given away at the Maryland Building and also in the Transportation Building, where Major J. G. Pangborn celebrated Maryland Day

with music and decoration of the Baltimore and Ohio Railroad's great exhibit showing the evolution of the locomotive.

The first suggestion of the World's Fair to commemorate the four hundredth anniversary of the discovery of America was, as stated by Governor Brown in his speech, a Maryland suggestion. It was made by the Baltimore Sun January 2, 1882, the idea then being that it would take ten years for the necessary preparations. The Maryland idea was to make the four hundredth anniversary of the discovery of America by Columbus the occasion for bringing the whole world together. The suggestion was one which had weight. It has been proved to be an idea that sufficed to bring the world together—not in Baltimore, it is true, as was desired, but in Chicago, as Congress decreed.

At the instance of Mrs. John Ritchie, the Liberty Bell in front of the Administration Building, near Music Hall, was rung in honor of Maryland Day by Bartholdi, the French sculptor of the Liberty Statue in New York harbor.

The ceremonies were concluded by a reception in the evening by Governor Frank Brown at the Maryland Building, and afterwards by luncheon. The Maryland Building was illuminated. Chinese lanterns and lamps were placed all about the grounds, and the word "Maryland" in lights was displayed on the grass of the north front. There were specially designed fireworks on Lake Michigan. Pieces illustrating the bombardment of Fort McHenry and a design of the national flag were displayed with beautiful effect. There was such a crowd at the Maryland Building that it was hardly possible to move through the rooms with ease. Everybody was delighted with the success of the day's celebration.

GOVERNOR BROWN'S ADDRESS.

Governor Frank Brown, of Maryland, said:

"My Fellow-Citizens: In appearing before you to speak a word in behalf of the old Commonwealth which I have the honor to represent as its chief executive, I do so with feelings of pride—not only of the fact that in this Union of States Maryland plays such a conspicuous part, but also proud of the fact that Maryland was one of the original States that formed this compact, and that upon Maryland's soil the voice of the Father of our Country was last heard as the warrior and statesman in one. Maryland is the fortunate owner of the building in which the immortal Washington surrendered his commission. It was in Maryland's State House, in the eighteenth century, that the treaty of peace with Great Britain was ratified by Congress. And in the same building the first convention for the formation of the constitution of the United States was held.

"It is to Maryland that you are largely indebted for the location of our national capital at the city of Washington, she having ceded that section of our State now known as the District of Columbia upon the condition that it should be the permanent seat of government.

"I hope the citizens of this great and rich State of Illinois and those from the other Northwestern States will pardon me for making the assertion that, except for Maryland, those States of the Northwest might not have existed to-day as separate and distinct governments. If you ask why is the credit due to Maryland for the formation of these States, the answer is that Maryland refused to join the confederation of thirteen States unless the States of New York, Virginia and others of the Northeast would cede to the general government the lands that these States claimed northwest of the Ohio river and extending to the Mississippi. Maryland contended that this great Western country

was taken from England by the blood and treasure of the thirteen States, and, therefore, should be considered as common property to be divided by Congress into free governments. She was the last State to join the confederation, refusing to do so until her claim was conceded. Although the remaining States had ratified the articles, Maryland still forbade her delegates in Congress to do so until the land claims were satisfactorily adjusted. I therefore say that to Maryland you largely owe your existence as separate and distinct sovereignties

"Maryland not only figured conspicuously in the early history of this country, but to-day she holds her position among the leading States of this Union in all that makes the country great. It is to the enterprise of her sons that you of the West are largely indebted for all that has made you rich in lands and commerce. The citizens of Baltimore were the first to reach out to you the hand of fellowship by the construction of a steam railroad from the seaboard into the undeveloped interior of the West. We of Maryland were the originators of steam railways and of railroad charters in this country, and have stamped our road the Baltimore and Ohio, and were the first to introduce the telegraph as a means of communication by constructing the Morse telegraph line from Baltimore to Washington, and were amongst the early movers in steam navigation. And when one gazes upon this magnificent panorama of buildings and exhibits, which we as a united country present to the world, one can well quote the first telegraphic message which flashed across the Morse instrument from Washington to Baltimore, 'What hath God wrought?' And to the world at large we claim, without fear of contradiction, that Maryland stands forth proudly towering not only over her sister States, but over the civilized world, with the proud record of being the first government to declare for religious liberty and free exercise thereof.

"Coming to the present day, if I mistake not, the inception of this exposition came from one of the daily journals of Maryland, the Baltimore Sun, as far back as 1882—it is true, with the hope that it might be at our metropolis or at our national capital. And step by step the idea has been fostered by our citizens, never losing sight of its importance to the country at large. We are here to-day to join hands and congratulate our sister States upon this magnificent display of the resources and products of the greatest country on which God's sun to-day shines. We are here to join hands with you not only as sister States, but with our foreign brother, with whom we are directly connected by navigation from our seaboard at Baltimore to all parts of the world. And to these foreign countries we extend the most cordial welcome, and with the hand of fellowship we congratulate them upon the magnificent exhibits with which they have honored us for the second time, embracing some of the works of art and science which have made their countries famous.

"Maryland, though smaller in area than some of the great States of this country, is equally proud of the possessions with which Almighty God has blest her—with a full and free exercise of religious liberty; with her many religious and charitable organizations; with her sound and safe financial institutions; with her great mineral wealth; with the oyster beds of the Chesapeake, the most extensive in the world; with her mountains of coal, marble and granite; with the fertile lands, and with a healthy and salubrious climate; with her happy, prosperous, conservative and orderly people, and with the knowledge that her people construct to-day from the yawlboat to the steel cruiser, and from the wheelbarrow to the palace car, and with the fact that the whirl and hum of her machinery is felt in every clime, and that upon the seas of all nations ships are now sailing under the white wings of Maryland cotton duck,

and through the port of Baltimore has been exported more of the grains of this country than in any of the great seaboard cities. The tall spires that adorn the cities within her borders indicate the thrift and enterprise of her people. The foreign markets seek her ports for tobacco, wheat, corn, rye, oats, barley and hay. Her waters are as pure as the drippings from the mountain top. And she stands in the proud position of not only being the gateway between the North and the South, but the most direct and the nearest seaboard city to the Pacific Slope.

"Time prevents me from referring to her great men and to the important work they have performed as statesmen and soldiers. But I simply indicate to a limited extent the great work that has been accomplished by a few of her citizens from patriotic, inventive and industrial standpoints. For Maryland is not only proud of the part her people have taken in the enterprises and progress of this country, but she is proud of the patriotism they have evidenced in all the great struggles in which this country has been engaged; also of the appreciation of her people of the work of the great men of our country and State.

"Upon Maryland's soil, and within the limits of the city of Baltimore, stands the first monument erected to the memory of Christopher Columbus, the discoverer of our country. Maryland was first to erect a monument in commemoration of the memory of the Father of our Country, which stands upon an eminence in Baltimore city—a shaft two hundred feet high, known as 'Washington's Monument.' Another of our monuments, known as 'Battle Monument,' was erected in memory and bears the names of those who fell in the defense of our State and country in contending against the British forces in the years 1812–14. So you see she is always patriotic and ever ready to do her duty in peace or at war.

"There has been no time in the history of this great country when we have better evidence of the stability of our State and people than the present. On every hand and in every daily sheet we are warned of the failure or embarrassment of some financial institution, but Maryland stands forth in her proud position with not one blot upon her escutcheon."

MR. FINDLAY'S ORATION.

Mr. John V. L. Findlay, the orator of the day, said:

"I rejoice that Maryland has something to boast of besides sticks and stones It is true that her mountains are seamed with inexhaustible veins of coal with an established reputation in all the markets of the world; that her hill slopes purple with the grape; that her valleys are rich in wheat, corn and tobacco, and that just now the crimson of the peach mantles in her blushing cheeks from mountain top to tide. The books will tell you that the Chesapeake hides beneath its broad waters mines of wealth more valuable than coal or iron, and that in the varied developments of agriculture, manufactures, commerce, the arts, and all the advanced processes of the higher education, particularly for women, Maryland is no laggard in the column of progress, but has her foot well advanced at the very head of the procession. But in the battle of the balance-sheets she will not only have eager competitors, but successful rivals. You must look elsewhere, therefore, for the real glory of Maryland than a census report, or even that very valuable work on the resources of the State recently published, and which every one should consult who would understand how surprisingly full Maryland is of everything that contributes to the comfort and well-being of men.

"A State not less than an individual develops a distinctive character, and much of this character in both cases depends upon the original shoot and direction it

has been forced to take. The full developed man is, after all, but the evolution of the infant in the cradle; nay, more, the matured man is but the final expression of congenital and antenatal forces. In the same sense the body-politic, which we style the State, develops in accordance with a law deeply radicated in original tendencies. This law of birth that impressed itself upon the character of Maryland, and under the dominion of which the colony began to develop while still in a state of embryo in the groping conception of the elder Calvert, and through every subsequent stage of its career, with an occasional variation and eccentric departure, it is true, from the original trend, yet still on the whole preserving the proportions of symmetrical growth, was no other than that which Christ laid down in simple phrase as the law universal of the moral world: 'Do unto others as you would have others do unto you;' a law as all-comprehending in the magnificent sweep of its generalization, as minute and microscopic in its application to particular instances, as the law of gravitation itself.

"It may be that George Calvert and his sons Cecilius and Leonard had no clearer understanding of the great work they were accomplishing or the world-circling sweep of its influence than Columbus when by accident he stumbled on the picket posts of a continent. It may be, on a strict analysis of motive, the earthly and the human so mingled with the divine as to obscure and impair the perfect integrity of their work. What then? Are we to join the mob of iconoclasts and deny the merit of the most beneficent act performed—I was about to say since Calvary? Nay, what was the sacrifice of Calvary worth if the sacred blood that then flowed merely prefigured the rivers of blood that were to flow thereafter from a world in arms for Calvary's sake and fighting and hacking in the name of Christ Himself.

"I contend with confidence that the State which can claim the birthplace of religious liberty has a title to distinction paramount to all the inventions of art or the achievements of genius, and that the sagacious and charitable spirit of toleration infused into the early administrative policy of Maryland, and afterward incorporated into the positive law of the land, has contributed more to the peace and happiness of mankind than all the wonderful appliances and devices which fill these buildings, and that if it were possible to take a step backward and repeal the solemn guarantees now operative in the policy or imbedded in the constitutions of all civilized Christendom, whereby man is secured in the right to worship God or not, as he pleases, the relapse into barbarism would be more hopeless than if the world should lose the knowledge and use of steam and electricity altogether. In making this assertion, I am not unmindful of the fact that the toleration of Calvert was confined to believers in the Christian religion, at least so far as it was enacted into law, and that infidels and others not accepting the orthodox faith were excluded from its protection. But at the same time I cannot forget that if the history of the world, and of this country particularly, shows anything, it demonstrates that great principles, in all the stages of conception, birth and growth, mature slowly, and that the physical world, in the protracted evolution, by which it has been perfected from the first crude beginnings to the rounded star, seems to find an analogue in the long-drawn-out and elaborate processes by which the moral economy emerges from chaos and marshals its forces into order and light.

"This 12th of September might be appropriately observed and hereafter made a national holiday in honor of the star-spangled banner, for although in strictness this immortal lyric did not fashion itself in the overwrought imagination of Key until the early morning

of the 13th of September, it is nearly enough connected in time and with the sequence of events originating on the day before to be treated as an incident of the occasion which this anniversary more especially commemorates. The stars and stripes themselves had streamed at the front of two wars before the kindling genius of a Maryland man, exercised in the white heat of battle, translated the dumb symbol of national sentiment into a living voice and made it the sublime and harmonious interpreter of a nation's progress and power.

"Without Maryland I do not think it is straining history or indulging in a meaningless exaggeration to say that there would have been no United States; that is, a union formed at the time and under the conditions in which the United States, as we know it, originated, and in affirming this I am stating a proposition of immense significance to the whole domain northwest of the Ohio.

"It is a fact too well-known to the students of our history to require more than a passing reference that it was the sagacious, resolute and persistent stand of Maryland which saved to the Union all that portion of territory now carved into the powerful and populous States lying northwest of the Ohio and east of the Mississippi. The claim of Maryland, founded in justice and right, was that this territory, having been won by the common exertions and sacrifices of the United Colonies, was common property, to be used for the common benefit of all. This claim was resisted by Virginia and by other members of the confederation, claiming under elastic grants stretching from ocean to ocean, but especially by Virginia, the dear old mother of States and statesmen, who, even at that early day, had fallen into the habit of claiming the earth. Maryland refused to ratify the articles of confederation and was ready almost to hazard the success of war until this question was settled. Other members of the confederation who had united in supporting her contention yielded, but she stubbornly

held out until the unreasonable pretension was abandoned.

"It is more than probable that the union which was made possible by the final concession of this claim would have been postponed until the then opportune fusion of the elements had cooled, or run into other and different moulds. Consider for a moment what the consequences would have been if Virginia, the largest claimant of the 'back lands,' as they are called, had not with enlightened patriotism at last yielded to the firm demands of Maryland, and all this territory had remained a part of the public domain of the Old Dominion, to be parceled out in land bounties to her officers and private soldiers just returned penniless from the war, or sold to replenish the failing revenues of her treasury, and you will see there is margin enough for the imagination to substitute a landed aristocracy on these fertile prairies, bound, it may be, by ties of allegiance to Virginia, in the place of the independent farmers who now till the soil which they own, all citizens of their own States, and partakers of the grandeur and dignity of that nobler citizenship which is derived from the United States.

"In the early days of the republic the men of Maryland, with unparalleled boldness, threw off their allegiance to the British crown by demonstrations of open hostility nowhere else witnessed in the colonies. Massachusetts (and for all she has done and for the immortal names she has added to the roll of fame no State rejoices more than Maryland), but Massachusetts, in her early inquiries for liberty, hampered it maybe by her surroundings, traveled, like Nicodemus, by night. Maryland, on the same journey, illuminated her pathway by a bonfire in Annapolis harbor, the flames of which flashed into the eyes of authority itself.

"While some of the settlements protested as for a violation of common right, the courts of Maryland solemnly decided that the stamp act was unconstitu-

tional. It is true there were reasons to be found in the charter of Maryland which gave a peculiar sanction to this decision, yet, nevertheless, it has always struck me as the most unique and audacious stroke of the Revolution this deliberate vacation and annulment of an act of Parliament by Frederick County Court, involving the exercise of a power which the highest court of Great Britain would not have dared to assert, and at the same time foreshadowing the peaceful North American policy of turning over for final adjudication disputed questions of constitutional law to an enlightened judiciary.

"Maryland has not only on the whole been true to the principles of her faith, but in times of the severest financial strain has preserved her honor pure and spotless as a virgin's. During the period of the confederation, under great provocation, she yielded in a weak moment and consented to the issue of paper promises to pay, then known as bills of credit, to a considerable amount, but soon afterward, in 1786, guided by her good genius, she resolutely turned back again into the paths of honesty and truth, from which she has never swerved since. At a later period, ambitious and enterprising beyond her strength, pushing out her tentacles by water and rail to establish closer connections and draw in a larger trade from this western country, in which she was ahead of all her rivals, and smitten by the disastrous consequences of the panic of 1837, it seemed for awhile as if the enormous obligations she had assumed for the construction of the Baltimore and Ohio Railroad and the Chesapeake and Ohio Canal would overwhelm her in bankruptcy, and, like a good ship struck by a sudden squall, she bent and staggered for a moment, but in the end shook herself free from every embarrassment and discharged all her obligations to the last cent. The credit of Maryland stands as high to-day as that of Great Britain or the United States.

"Men of Maryland, you who are here from the slopes of the Alleganies or the blue ranges of the North and South mountains; you who have come from the City of Monuments, one of which records in imperishable marble the devoted valor of her patriotic sons who made this anniversary day illustrious in her annals; you who have come from the lowlands where the Atlantic breaks in thundering surge, or the bay, in softer key, laps the sandy beach of either shore, and all you, sons of Maryland, who left the old roof tree to follow the immigrants' trail through prairie and forest, and finally to hew out for yourselves a home in the far West, you and your children, wherever you come from, wherever you go, let the proud fame of your old State, associated with such traditions as these, cling to you like a mother's blessing and mingle in memory forever."

CHAPTER X.

MARYLAND BUILDING, WORLD'S FAIR, 1893.

The Maryland Building at the Columbian Exposition, Chicago, cost $20,000. It was designed by Baldwin & Pennington, architects, of Baltimore, and built by F. Mertens' Sons, of Cumberland, Md. The style of architecture is the so-called "free classic." The extreme dimensions of the building, including porches, are 142 feet long by 78 feet deep. The exterior is made of staff. The building has three handsome entrance porticoes, with columns of the Corinthian order of architecture. A spacious piazza, with deck roof supported by Corinthian columns, is constructed in the rear. The central part of the first floor is occupied by a reception-room, bureau of information and a grand stairway, all treated in the colonial style, with rich details and delicate lines. On the right of the reception hall is the exhibition hall, 25 by 26 feet, set apart for woman's work. This hall is supplemented by a ladies' parlor, 11 by 20 feet, and a toilet-room 8 by 15 feet. On the left of the reception hall is the general exhibition hall, 36 by 26 feet. On the second floor are three parlors, 13 by 17 feet each; an office, 8 by 16 feet; reading-room, 20 by 26 feet; smoking-room, 11 by 16 feet, and a toilet-room for gentlemen.

The building was used not only as headquarters for all citizens of Maryland, but as a place for receiving their mail matter, and for the exhibition of some of the more interesting products of the State and its historical souvenirs.

THE COMMISSIONERS.

The U. S. Commissioners for the State of Maryland are as follows:

James Hodges.
Mrs. Wm. Reed.
Lloyd Lowndes.
Mrs. Alex. Thomson.

MARYLAND STATE BUILDING, CHICAGO, 1893.

ALTERNATES.

George M. Upshur. Daniel E. Conklin.
Mrs. J. Wilson Patterson. Miss Eloise Rorman.

The State Commissioners appointed by the Governor are as follows:

Frank Brown, Governor.
F. C. Latrobe, Baltimore.
Mrs. William Reed, Baltimore.
Murray Vandiver, Harford Co.
David Hutzler, Baltimore.
J. Olney Norris, Baltimore.
Frank N. Hoen, Baltimore.
Frank S. Hambleton, Baltimore.
John R. Bland, Baltimore.
H. H. Dashiell, Princess Anne.
Frank R. Scott, Elkton.
James T. Perkins, Prince George's Co.

OFFICERS.

Governor Frank Brown, President.
Mayor F. C. Latrobe, Vice-President.
J. Olney Norris, Secretary.
Frank S. Hambleton, Treasurer.
Wm. H. Love, Recording Secretary.

EXECUTIVE COMMISSIONER.

George L. McCahan.

COMMITTEE ON WOMAN'S WORK.

Mrs. Wm. Reed, Baltimore, *Chairman.*
Mrs. Elihu E. Jackson, Salisbury.
Mrs. John Ritchie, Frederick.
Miss Isabel Hampton, Baltimore.
Miss M. E. Richmond, Baltimore.
Mrs. Chas. M. Ellis, Elkton.
Mrs. Alexander Neill, Hagerstown.
Miss Henrietta Szold, Baltimore.
Miss Elizabeth King, Baltimore.
Mrs. Henry Stockbridge, Baltimore.

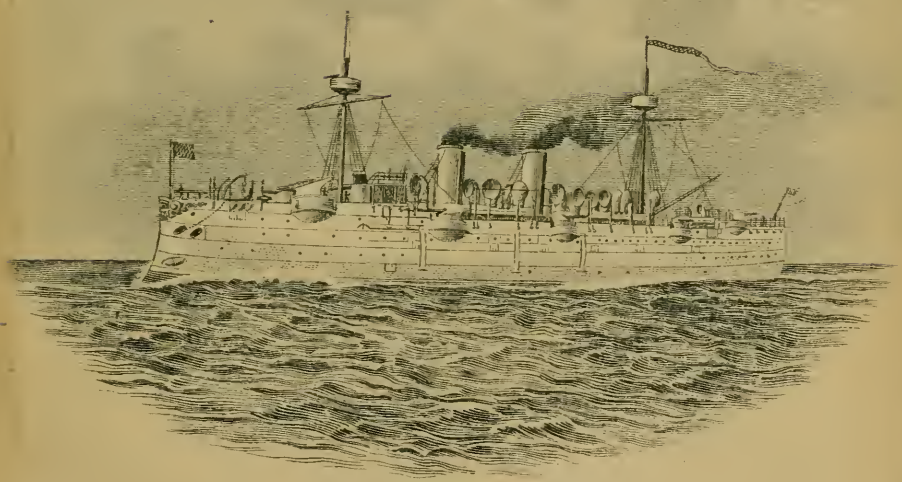
CHAPTER XI.

THE CRUISER BALTIMORE.

The U. S. Steamship Baltimore, launched at Philadelphia, October 6, 1888, being the first protected cruiser of the new navy, was presented with a select library by the A. S. Abell Company, publishers of the Baltimore Sun, in honor of the name she bears. On the trial trip September 14, 1889, the Baltimore developed an average speed of 20 2-10 knots an hour. Commodore W. S. Schley, of Maryland, who was appointed to command the vessel, declared that the cruiser was the fastest vessel of her tonnage afloat, and the fastest man-of-war in the world at that time. On Friday, November 15, 1889, another trial at sea was given, in which the speed averaged 20.1 knots an hour, and the horse-power was 9,600, or 600 above contract requirement.

The Baltimore is classed as a "protected cruiser." The length of the ship is 335 feet; beam 48 feet 6 inches; mean draught 19 feet 6 inches, and displacement tonnage 4,392. The cost of the ship without armament was $1,325,000. The material used in construction is mild steel. The plating is five-eighths of an inch thick. The protective deck is two and a-half inches to four inches thick, and the conning tower three inches thick. The motive power is steam alone. The cruiser has twin-screws with horizontal triple expansion engines, capable of developing over 9,600 horse-power, and driving the vessel at the rate of 20.1 knots an hour, or 23.3 miles per hour, under forced draft.

The principal battery consists of four 8-inch breech-loading rifled guns, mounted on the forecastle and poop decks, and six 6-inch breech-loading rifled guns mounted in broadside on the main deck. The weight of fire from



THE CRUISER "BALTIMORE."

these guns ahead and astern is 700 pounds; the same abeam or in broadside is 800 pounds. The secondary battery consists of two 1-pounders, two 3-pounders and four 6-pounders, rapid-fire guns, four Hotchkiss revolving cannon and two Gatling guns, mounted on the rail and in the military tops. The vessel is also equipped with V torpedo tubes for using the Howell automobile torpedo.

The Baltimore is fitted with complete electric machinery and electric lights throughout the vessel. She has four powerful search lights and ninety-eight watertight compartments. The machinery of the vessel includes forty distinct and separate engines for various uses. The ventilation is perfected by two blower engines, the pipes from which reach every room and compartment.

On the 8th of May, 1890, the Cruiser, commanded by Captain W. S. Schley, came to Baltimore and received the honors of the city for which the vessel was named. The officers and crew enjoyed a round of five days entertainment, and thousands of people visited the ship. The Sun, May 9, issued a handsome illustrated supplement on a fac-simile page of the paper, giving a picture of the new cruiser under full steam, with portraits grouped around it of Admiral Gherardi, Commander Schley, Lieutenant-Commander Sebree and Chief Engineer Wharton. There was also a fine picture of the typical American sailor, of The Sun library, presented to the vessel, of the City Hall, of the Washington Monument and The Sun Building. The supplement, printed in five colors, was equally creditable to Baltimore artistic workmanship and to the subject commemorated.

SONG OF "THE BALTIMORE."

Dedicated by THE SUN to the Cruiser Baltimore.

Music by Adam Itzel, Jr.

Hurrah for the Cruiser Baltimore!
Hurrah for the clipper ships of yore
That flung their white wings to the breeze
And led the van in all the seas!
The Baltimore! The Baltimore!
And all the clipper ships of yore!

Look where she floats all trim and neat,
The swiftest racer of our fleet:
Manned by a bold and valiant crew,
In freedom's cause to dare and do.
Oh! seamen now and evermore
Keep bright her name of Baltimore!

By freemen forged, from deck to keel,
Her iron ribs and plates of steel;
And every plank by freemen trod
Drew life and strength from freedom's sod
The Baltimore! The Baltimore!
The gallant Cruiser Baltimore!

A thousand hearts will follow thee
To every port and every sea:
Brothers and friends where storm winds blow,
Or beats the sun or falls the snow,
All hail with joy the wide world o'er,
The twice dear name of Baltimore.

SOME OTHER STEEL CRUISERS.

Two cruisers of the United States navy, the Detroit and the Montgomery, built at Baltimore, and their sister ship, the Marblehead, built at Boston, are deserving of mention. These ships are partially deck-protected, twin-screw steel cruisers, each being of the same measurements, draught of water, horse-power and armament. Their dimensions are as follows:

Displacement, tons, 2,000.
Length on load-line, 257 feet.
Breadth of beam, 37 feet.
Draught of water, 14 feet 5 inches.
Horse-power, 5,400.
Contract rate of speed, 17 knots.

The armament provided for each ship is as follows:

Two six-inch breech-loading guns.
Eight five-inch breech-loading guns.
Six six-pounder, quick-firing guns.
Five machine guns.
Six torpedo launching tubes.

The motive power is furnished by two triple expansion engines placed side by side, but in separate water-tight compartments. They are of the vertical, inverted cylinder, direct acting type, with cylinders 26½, 39 and 63 inches in diameter by 26 inches stroke, designed to make 185 revolutions per minute. There are five boilers, three of which are double-ended, horizontal, return fire tube type, 18½ feet long by 11 feet 8 inches diameter, and two single-end boilers 9 feet long by 11 feet 8 inches diameter.

The sail equipment consists of two masts, rigged schooner type, with a square sail on the foremast, the total canvas area being 6,289 square feet.

The cruisers have what is termed an open gun deck, the poop and forecastle decks being connected by a bridge extending fore and aft. Under the water-tight deck are placed the engines and boilers, magazines,

shell-room, steering arrangements, &c., the space being so divided into compartments that should one section become disabled or flooded the others would remain intact and used for the purpose intended. There is extended through the principal part of the vessel a centre-line vertical bulkhead, which not only helps to support the water-tight deck but adds great strength, or, as some say, "back bone" to the vessel. It also divides the vessel into water-tight compartments.

Especially interesting is the coffer-dam protection along the entire machinery space, of cellulose. The Detroit was the first in the United States navy to carry this water-excluding belt, the efficiency of which had been practically tried in several navies, and notably in the case of the Danish vessel Hekla. There the thorough test was applied of shooting a projectile from a heavy gun entirely through the cellulose belt at the bows, and then steaming around for several hours, after which it was found that the water taken in prior to the automatic closing of the hole was only about a gallon. Cellulose is manufactured from the fibres of cocoanut husks, and has the property of absorbing eight times its weight of water. Its great utility in shipbuilding was discovered by a French naval officer, whose crew were firing at a target made of moistened cocoanut husks. When the marksmen examined their target they found that every perforation made by the bullets had closed, and with so great rapidity that not the slightest scar could be found. This led to a series of tests, which proved that ships built with a lining of cellulose would be practically unsinkable. There are 500 cubic feet of cellulose in the coffer-dams of these three sister ships.

The Detroit was launched October 28, 1891, and on the official trial trip made 18½ knots, which is 1½ knots in excess of contract stipulation. The Montgomery was launched December 5, 1891.

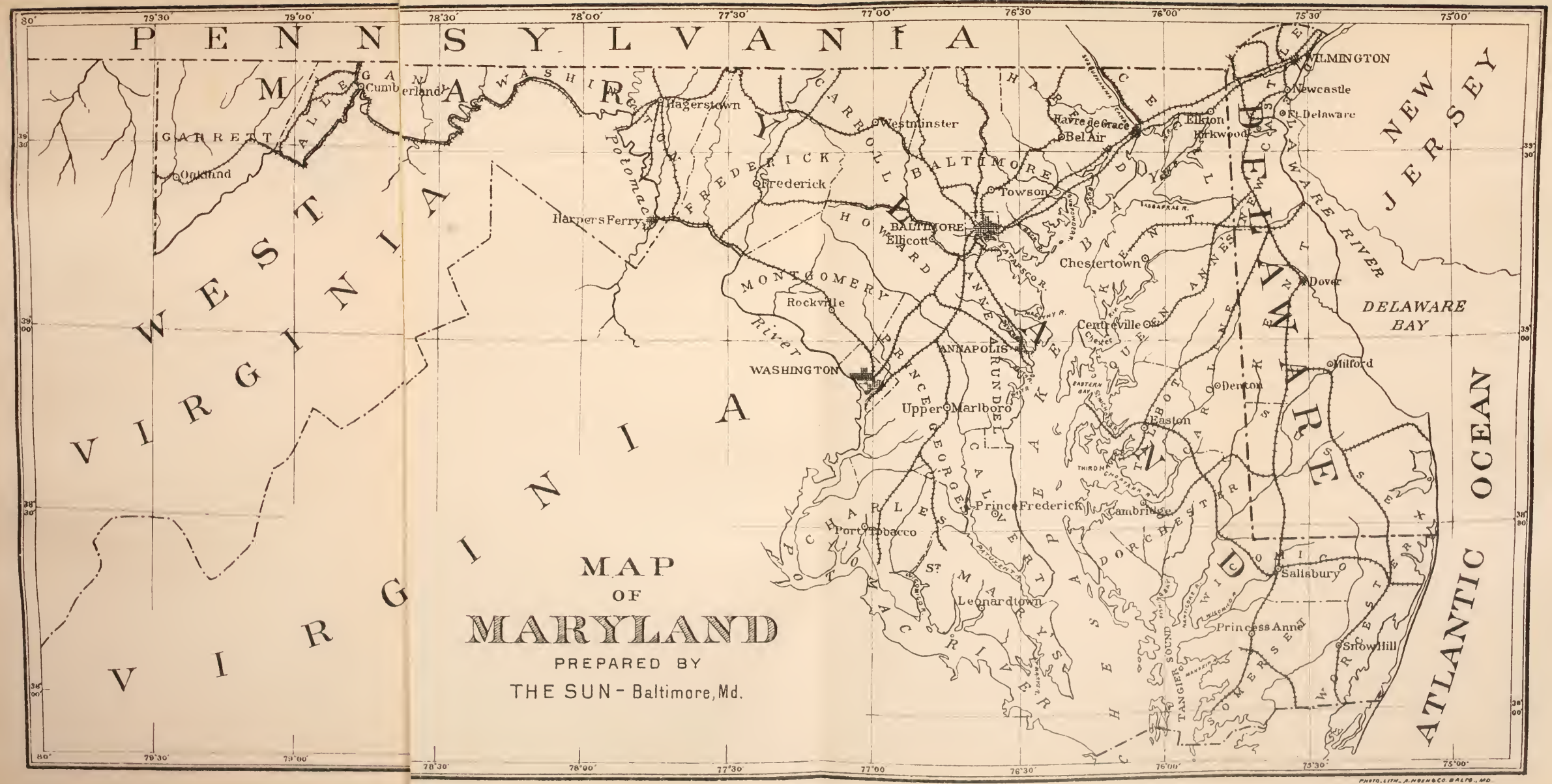


PHOTO. LITH. A. HOEN & CO. BALTO., MD.

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